Metra
inženiring d.o.o.

Locker Controller ELS & ELS SELECT *Technical Manual*

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Locker Controller ELS & ELS SELECT *Technical Manual*

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System: **Metra ELS & ELS SELECT– Electronic Locking Systems**

Product Group: **Locker Controller**

Types:

- **LC16AELKP, LC16AESKP, LC16ELKP, LC16ESKP, LC24ELKP, LC24ESKP, LC32ELKP, LC32ESKP** (Keypad)
- **LC16AELIS, LC16AESIS, LC16ELIS, LC16ESIS, LC24ELIS, LC24ESIS, LC32ELIS, LC32ESIS** (ISO 15693, ISO14443A/B)
- **LC16AELLF, LC16AESLF, LC16ELLF, LC16ESLF, LC24ELLF, LC24ESLF, LC32ELLF, LC32ESLF** (LF Multitag)
- **LC16AELMF, LC16AESMF, LC16ELMF, LC16ESMF, LC24ELMF, LC24ESMF, LC32ELMF, LC32ESMF** (Mifare)
- **LC16AELSD, LC16AESSD, LC16ELSD, LC16ESSD, LC24ELSD, LC24ESSD, LC32ELSD, LC32ESSD** (Skidata)
- **LC08** (Locker Controller Extension Module)

Year of Construction: 2008-2011

Declaration of Conformity: CE The Metra ELS & ELS SELECT products have been developed, designed and manufactured in accordance with the EU directive for *Electromagnetic Compatibility (2004/108/EC)*.

Locker Controller ELS & ELS SELECT Technical Manual [rev.0-140611]
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• Product description

Metra Locker Controller is used in different Metra Electronic Locking Systems. Device drives and monitors Metra Electronic Locks. Up to 16 locks can be connected directly to the unit, with the possibility to add up to two Extension Modules for 8 additional Electronic Locks each. This enables configurations for up to 16, 24 or 32 locks, which makes the controller adoptable to many locker layout configurations. As user interface different system specific Metra user interface devices (e.g. Display RFID/Keypad/Combo/Touch, Reader Terminal, Reader Terminal Basic, etc.) can be used.

Locker Controller also supports emergency and security features. A pushbutton for emergency opening of all Lockers connected to the Locker Controller (and belonging extension modules) is fitted on the main electronics board and also an external emergency pushbutton can be connected. In case of attempt of break-in an Alarm message is distributed over Metra NET Network to Metra user interface devices and over Metra Network Controller to LAN / WAN and Metra software.
Different (system specific) enhancing accessories are available: Euro deposit pad to limit locker misuse, coin acceptor to generate revenue from locker use, fingerprint module to lock / unlock lockers simply by placing the finger as an addition to Keypad and/or RFID media reader on user interface device.
For easier installation on site different configurations of controller & extension module(s) on mounting plates are supplied.

• Basic Parts

• Locker Controller PCB with two extension modules and connecting PCB

• Display

Display Combo

Display RFID

Display Keypad

Metra Display RFID is a user interface for Metra ELS systems, while Metra Display Combo and Keypad are a user interfaces for Metra ELS and Metra ELS SELECT systems.
Display Combo: Read RFID tickets as locker keys. Twelve key washable keypad is integrated to enable additional user interaction (PIN, locker number, etc.) and can be used for locking / unlocking instead of RFID media.
Display RFID: Reads RFID tickets as locker keys.
Display Keypad: Integrated 12 key washable keypad to enable user interaction (PIN, locker number, etc.).
Each model shows the locker number on a four digit LED display. They also perform audio signalization and show an alarm message if an attempt of break-in is detected on a Metra Electric Lock connected to a Metra Locker Controller.
Locker Controller's operating parameters are set up through integrated 4 key system keypad (Display RFID) or through 12 key keypad (Display Combo and Keypad) and stored in Locker Controller's internal battery powered memory. To simplify setup of Locker Controller and manage master keys and master/setup codes also Metra software can be used.

- Emergency Open Push-button (optional)

Emergency Open Push-button is used to initiate Emergency Open procedure for all Electronic Locks connected to Locker Controller.

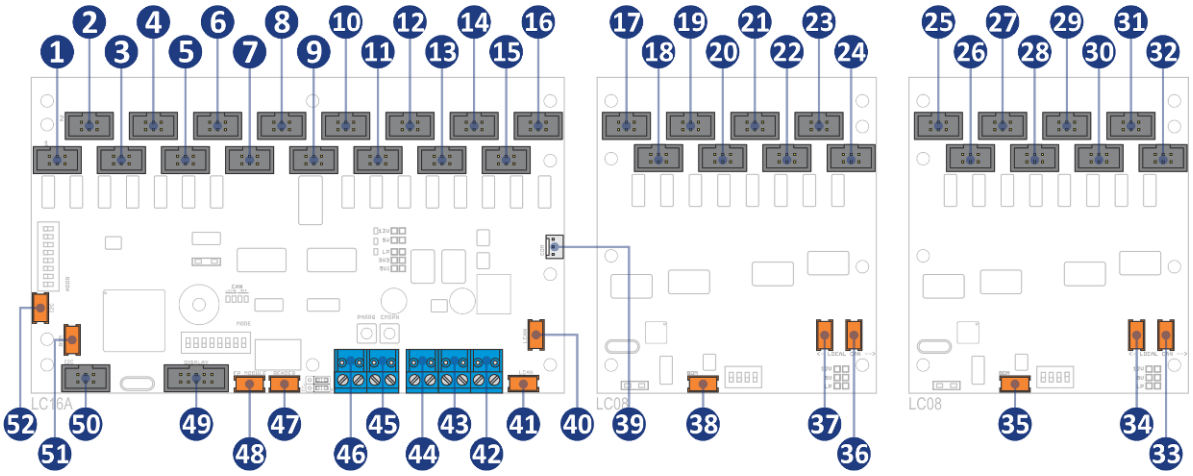
- Coin acceptor (optional)

Locker Controller can be configured to ask for payment when locking the locker door. In that case Coin Acceptor is mounted near the Display.

- Fingerprint module (optional)

Fingerprint module allows users to lock/unlock the locker by presenting the finger to sensor. It offers higher comfort for users as they don't need to remember PIN code or carry around the RFID media. When fingerprint module is connected to Locker Controller each user can freely choose whether he/she will lock the locker using fingerprint/PIN code/RFID media.

• Connections



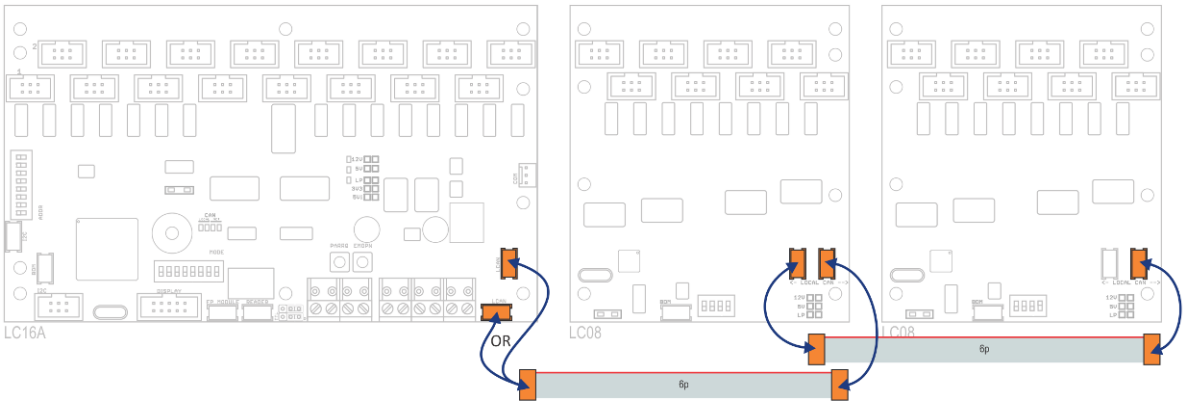
#	description
1	Electronic Lock 1
2	Electronic Lock 2
3	Electronic Lock 3
4	Electronic Lock 4
5	Electronic Lock 5
6	Electronic Lock 6
7	Electronic Lock 7
8	Electronic Lock 8
9	Electronic Lock 9
10	Electronic Lock 10
11	Electronic Lock 11
12	Electronic Lock 12
13	Electronic Lock 13
14	Electronic Lock 14
15	Electronic Lock 15
16	Electronic Lock 16
17	Electronic Lock 17
18	Electronic Lock 18
19	Electronic Lock 19
20	Electronic Lock 20
21	Electronic Lock 21
22	Electronic Lock 22
23	Electronic Lock 23
24	Electronic Lock 24
25	Electronic Lock 25
26	Electronic Lock 26

#	description
27	Electronic Lock 27
28	Electronic Lock 28
29	Electronic Lock 29
30	Electronic Lock 30
31	Electronic Lock 31
32	Electronic Lock 32
33	Local CAN*
34	Local CAN*
35	BDM Loader
36	Local CAN**
37	Local CAN**
38	BDM Loader
39	COM (Not used)
40	Local CAN***
41	Local CAN***
42	Metra NET Network
43	Power****
44	Power****
45	Emergency open pushbutton
46	Coin acceptor
47	Reader (Not used)
48	Fingerprint module
49	Display
50	I2C (Not used)
51	BDM Loader
52	I2C (Not used)

***NOTE:** Local CAN connectors 33 and 34 are internally parallel connected.
****NOTE:** Local CAN connectors 36 and 37 are internally parallel connected.
*****NOTE:** Local CAN connectors 40 and 41 are internally parallel connected.
******NOTE:** 12V DC Power connectors 43 and 44 are internally parallel connected.

• Connecting Locker Extension Modules

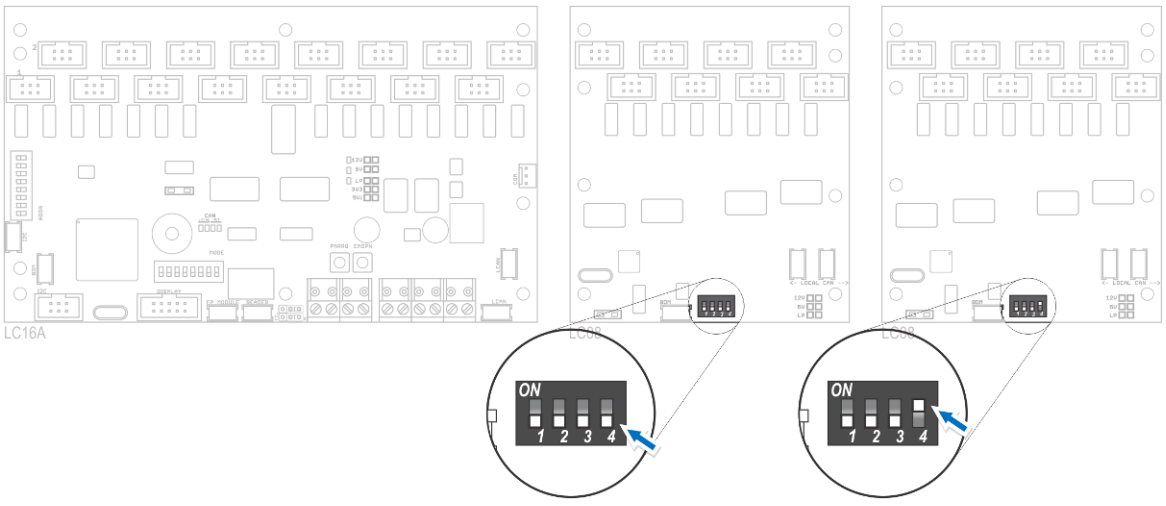
When Locker Controller without mounting plate is used connect up to two Extension modules by 6 wire flat cable. There are two equivalent connectors on the main electronics board (LC16A) use the one which suits your connection best.



When Locker Controller is ordered with mounting plate Extension Modules (LC24_* and LC32_*) are already connected.

• Locker Extension Module setting

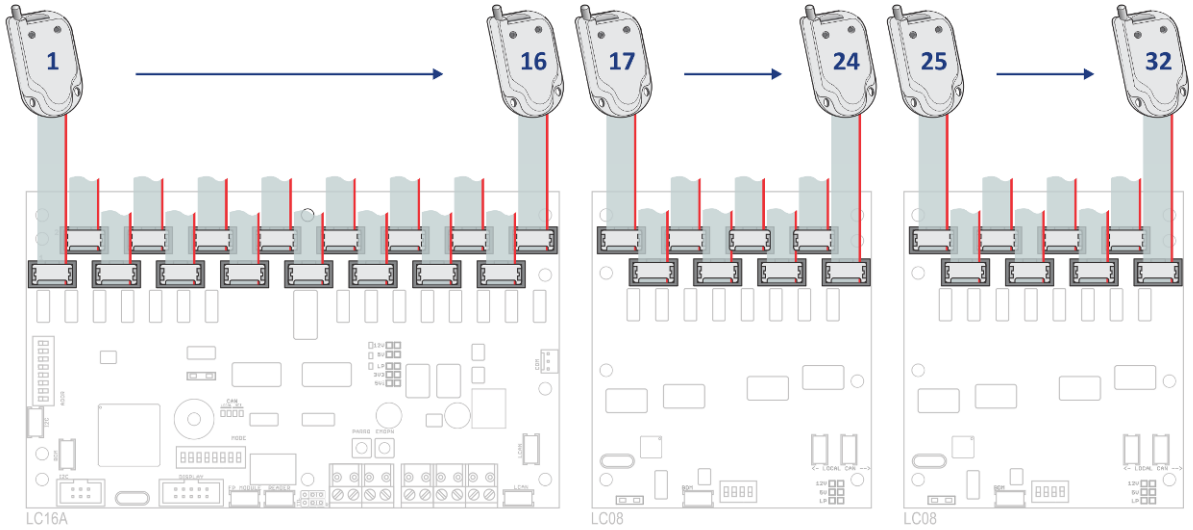
The first Locker Extension Module DIP switch (indexes 17-24) and second Locker Extension Module DIP switch (indexes 25-32) must be set as follows:



Extension Module #1 Extension Module #2

• Connecting Electronic Locks

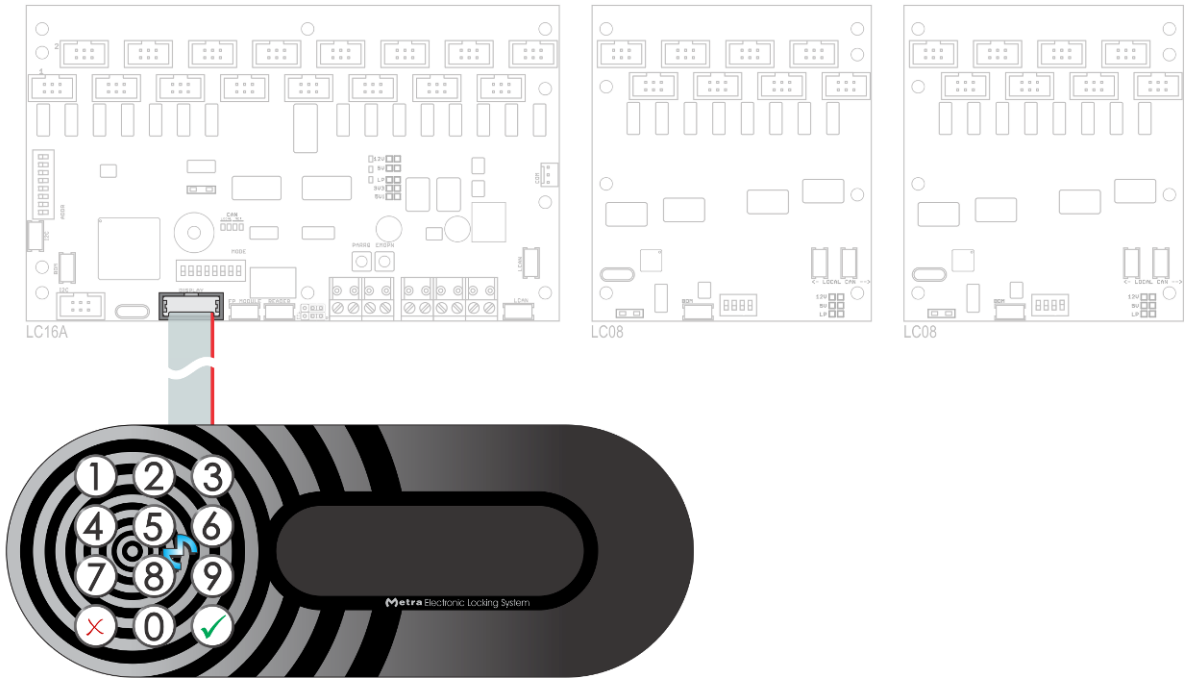
- Connect Electronic Locks using 6 wire flat cables.
- Maximum length of each cable is 20 meters.
- Cables from Electronic Locks with lower locker numbers must be connected to lower index connector. Locker number is increasing from left to right (blue arrows)!
- Mind ascending order when numerating lockers. Gaps between numbers are allowed.



EXAMPLE: Most left connector (index 1) is locker number 161, most right connector (index 32) is locker number 192.

• Display connection

Plug the 10 wire flat cable from the Display to the connector as shown in the schematic. See also *"Display – Technical Manual"*.



• Power supply connection (Locker Controller without distribution board)

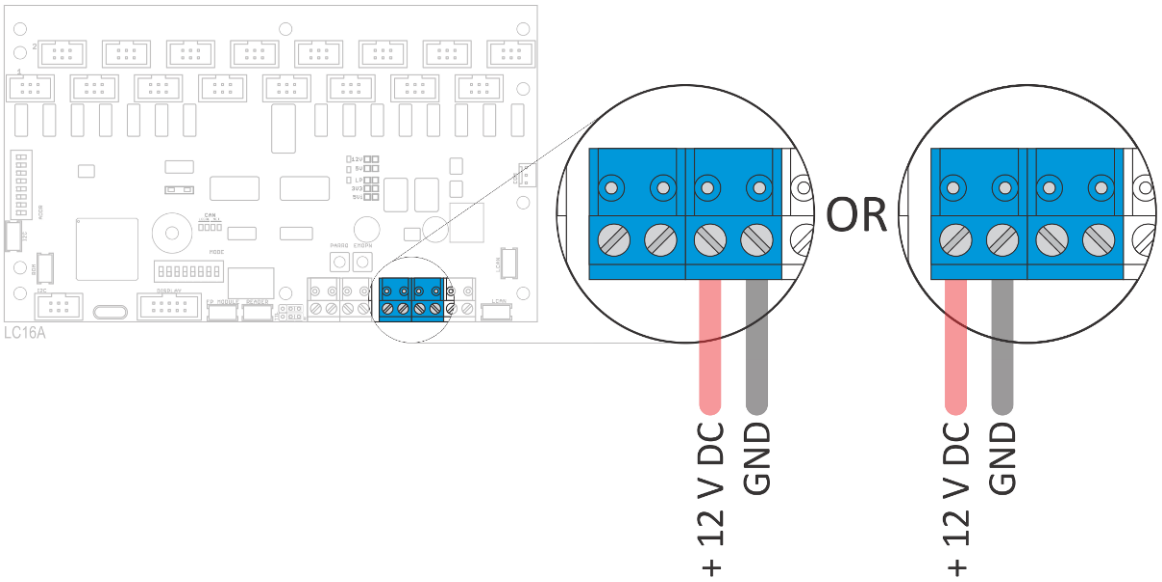
Regulated 12 VDC power supply is required for proper operation. Connect as many units as possible to a single power supply unit. Consult the Technical Specifications section of this document for current consumption.

There are two internally connected power connectors on the board. You can use one as “Power IN” and the other as “Power OUT” connector.

Connect 12V DC regulated power supply to designated terminals. The terminals are marked as **+12V** for positive connection and **GND** for ground connection.

☝ WARNING

- Mind the polarity! Wrong polarity could result in irreparable damage to the device.
- Respect power requirements data! Using unsuitable power supply could result in damage to the power supply and to the device.



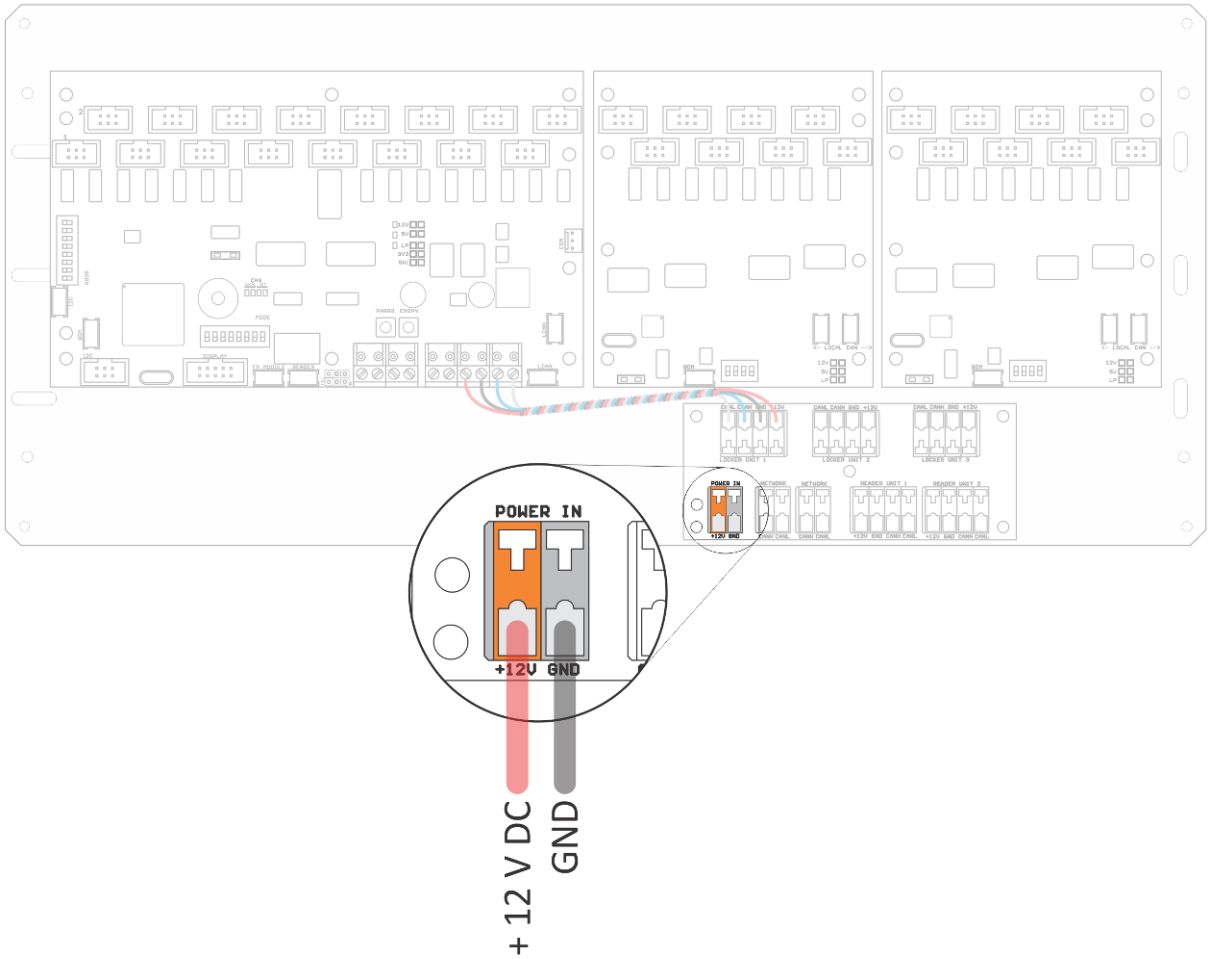
• Power supply connection (Locker Controller with distribution board)

Regulated 12 VDC power supply is required for proper operation. Connect as many units as possible to a single power supply unit. Consult the Technical Specifications section of this document for current consumption.

Connect 12V DC regulated power supply to designated terminals. The terminals are marked as **+12V** for positive connection and **GND** for ground connection.

☝ WARNING

- Mind the polarity! Wrong polarity could result in irreparable damage to the device.
- Respect power requirements data! Using unsuitable power supply could result in damage to the power supply and to the device.

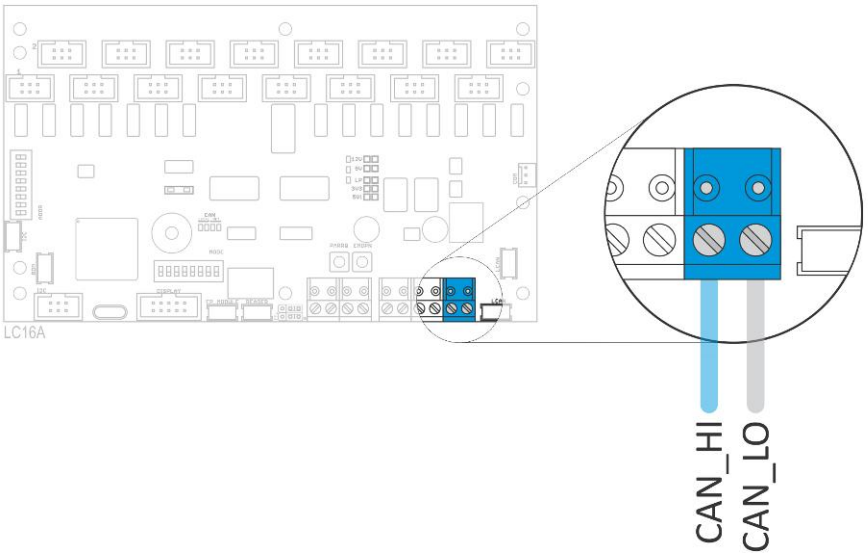


• Metra NET Network connection (Locker Controller without distribution board)

The Metra NET Network connection provides for operational functionality of the Locker Controller. Different devices in parallel can be connected to the Metra Network Controller by a single unshielded twisted pair (UTP) cable. Total length of the twisted pair cable is limited to 1 km. One Network Line Terminator must be connected at the far end of the network cable. See also *"Metra NET Network – Installation Manual"* for different wiring schemes.

Connect the twisted pair network cable to designated terminals. The terminals are marked as **CANLO** for network low signal and **CANHI** for network high signal.

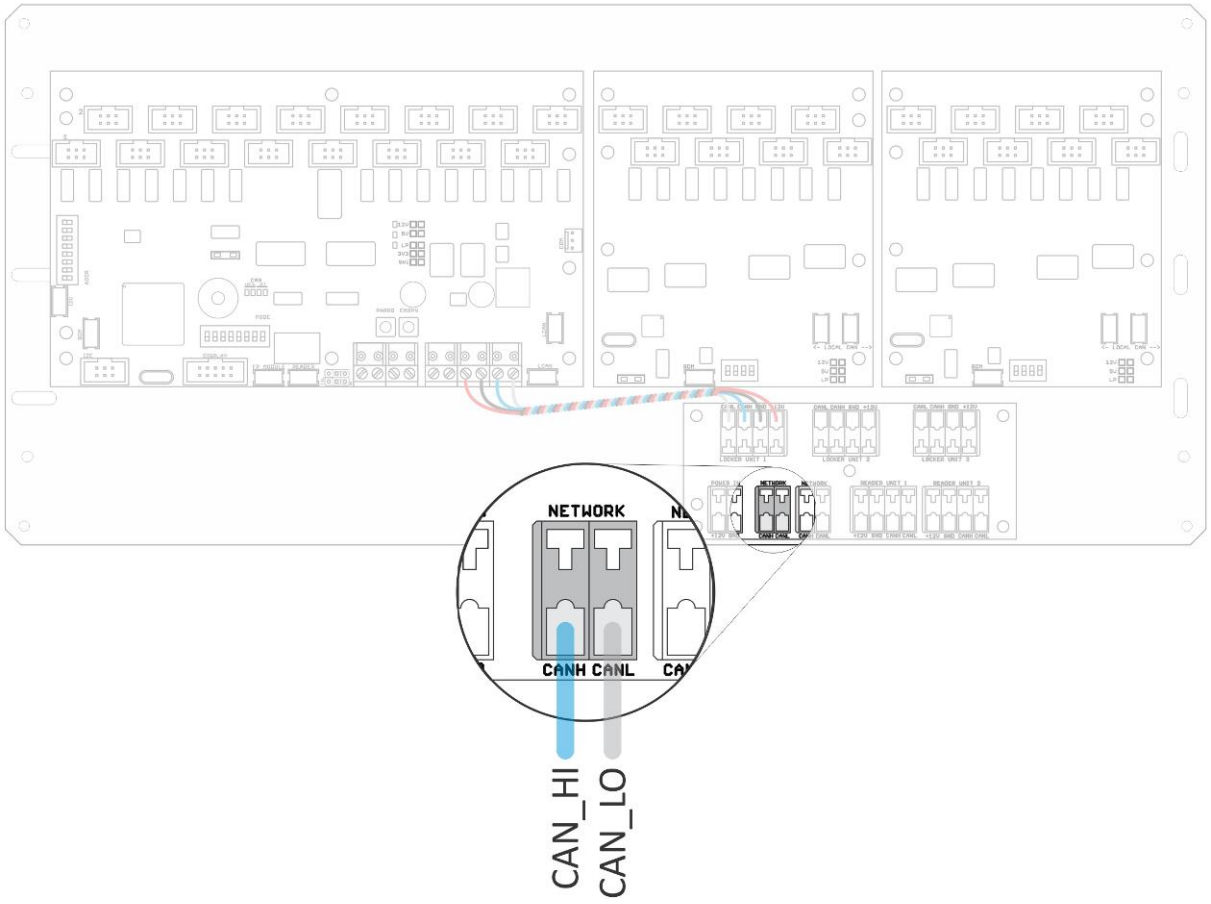
☝ NOTE ☝
Mind the polarity of the network connection!



- Metra NET Network connection (Locker Controller with distribution board)

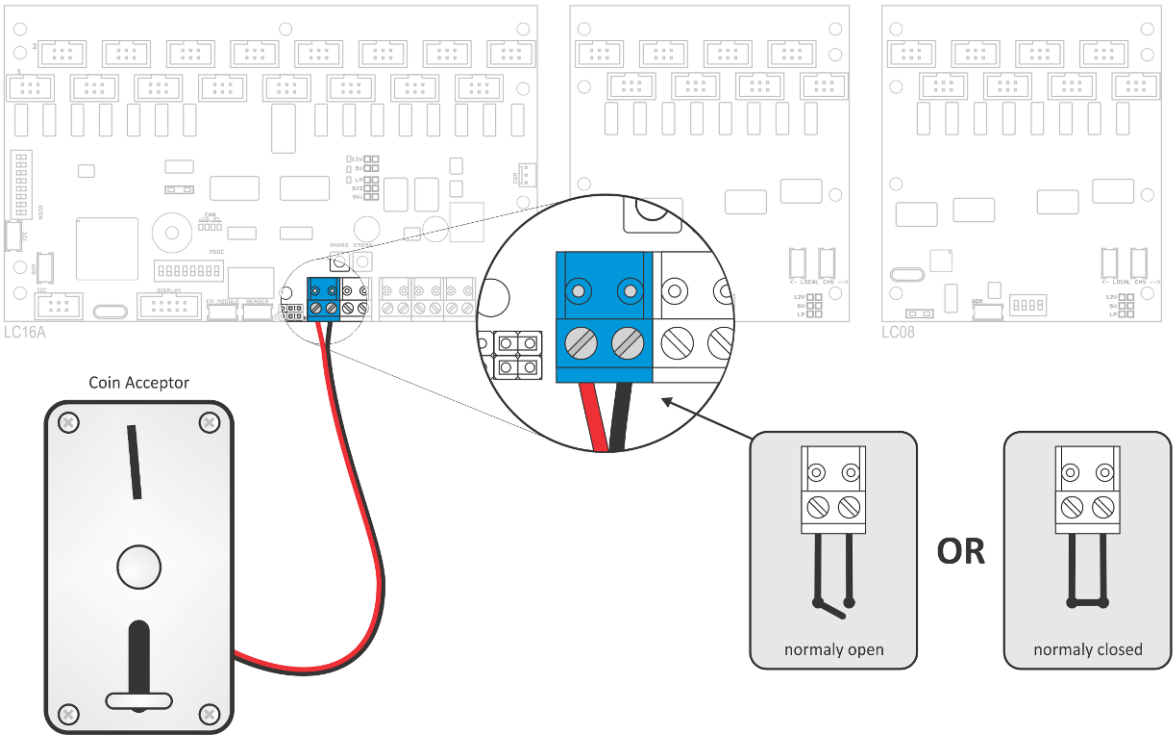
Connect the twisted pair network cable to designated terminals. The terminals are marked as **CANL** for network low signal and **CANH** for network high signal.

☝ NOTE ☝
Mind the polarity of the network connection!



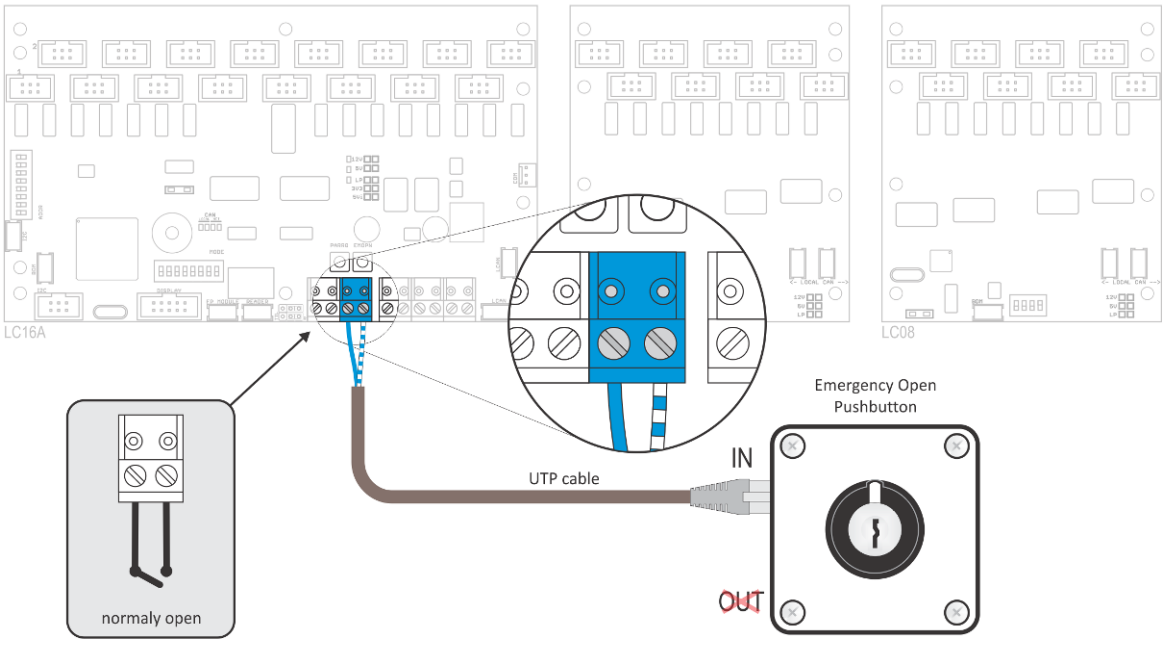
- Coin Acceptor connection

Connect the Coin acceptor to designated terminals as shown in the schematic.

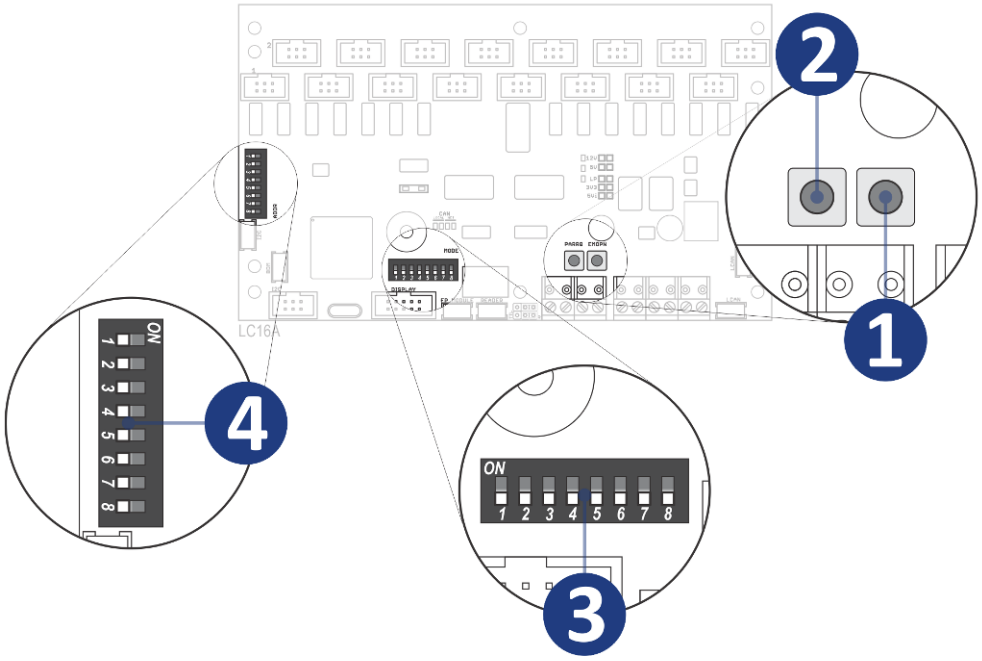


- External emergency open pushbutton connection (optional)

Connect the blue and blue/white wires of the UTP cable from the Emergency open pushbutton to designated terminals as shown in the schematic.



• DIP switch settings



#	description
1	Emergency open pushbutton
2	Parameters request button
3	Network Address DIP switch
4	Operating Mode DIP Switch

By changing the Operating Mode DIP Switch 4 pins positions, different operating modes and parameters can be set and by changing the Network Address DIP Switch 3 pins positions, different network address can be set. To change between different pins positions, use a small flat headed screwdriver or similar object to push DIP switch pins to desired position.
After each settings change or after device's first installation power off and back on the device (for the new settings to take effect) and obtain operating parameters if the device is connected to Metra NET Network controlled by Metra Network Controller and Metra SW.
Operating parameters are obtained through the Metra NET Network. The server must be set up and running for that purpose. To obtain operating parameters, press the PARAMETERS REQUEST 2 button.

☝ NOTE ☝
Before changing between Normal/Test or ELS/ELS SELECT mode of operation all lockers must be unlocked via external or internal emergency open pushbutton 1.

☝ NOTE ☝
Network based functionality will be present only if the server is running and the Locker Controller has been properly configured.

- Network address

After installation is complete, the device's network address must be set by changing the Network Address DIP Switch ❸ pins positions.

☝ NOTE ☝
Each Metra device must have different address setting.

Look up the code for desired network address in the coding table. Set switch **#1** to indicated position, where:

- 0 (switch down) = No offset in network address.
- 1 (switch up) = "+600" offset in network address.

Set switches **#2 through #8** to indicated positions, where:

- 0 indicates the corresponding switch is in OFF position (switch down)
- 1 indicates the corresponding switch is in ON position (switch up)

Coding table:

switch positions								address
1	2	3	4	5	6	7	8	
0/1	0	0	0	0	0	0	0	1/601
0/1	0	0	0	0	0	0	1	2/602
0/1	0	0	0	0	0	1	0	3/603
0/1	0	0	0	0	0	1	1	4/604
0/1	0	0	0	0	1	0	0	5/605
0/1	0	0	0	0	1	0	1	6/606
0/1	0	0	0	0	1	1	0	7/607
0/1	0	0	0	0	1	1	1	8/608
0/1	0	0	0	1	0	0	0	9/609
0/1	0	0	0	1	0	0	1	10/610
0/1	0	0	0	1	0	1	0	11/611
0/1	0	0	0	1	0	1	1	12/612
0/1	0	0	0	1	1	0	0	13/613
0/1	0	0	0	1	1	0	1	14/614
0/1	0	0	0	1	1	1	0	15/615
0/1	0	0	0	1	1	1	1	16/616
0/1	0	0	1	0	0	0	0	17/617
0/1	0	0	1	0	0	0	1	18/618
0/1	0	0	1	0	0	1	0	19/619
0/1	0	0	1	0	0	1	1	20/620
0/1	0	0	1	0	1	0	0	21/621
0/1	0	0	1	0	1	0	1	22/622
0/1	0	0	1	0	1	1	0	23/623
0/1	0	0	1	0	1	1	1	24/624
0/1	0	0	1	1	0	0	0	25/625
0/1	0	0	1	1	0	0	1	26/626
0/1	0	0	1	1	0	1	0	27/627
0/1	0	0	1	1	0	1	1	28/628
0/1	0	0	1	1	1	0	0	29/629
0/1	0	0	1	1	1	0	1	30/630
0/1	0	0	1	1	1	1	0	31/631

switch positions								address
1	2	3	4	5	6	7	8	
0/1	0	1	1	0	0	1	0	51/651
0/1	0	1	1	0	0	1	1	52/652
0/1	0	1	1	0	1	0	0	53/653
0/1	0	1	1	0	1	0	1	54/654
0/1	0	1	1	0	1	1	0	55/655
0/1	0	1	1	0	1	1	1	56/656
0/1	0	1	1	1	0	0	0	57/657
0/1	0	1	1	1	0	0	1	58/658
0/1	0	1	1	1	0	1	0	59/659
0/1	0	1	1	1	0	1	1	60/660
0/1	0	1	1	1	1	0	0	61/661
0/1	0	1	1	1	1	0	1	62/662
0/1	0	1	1	1	1	1	0	63/663
0/1	0	1	1	1	1	1	1	64/664
0/1	1	0	0	0	0	0	0	65/665
0/1	1	0	0	0	0	0	1	66/666
0/1	1	0	0	0	0	1	0	67/667
0/1	1	0	0	0	0	1	1	68/668
0/1	1	0	0	0	1	0	0	69/669
0/1	1	0	0	0	1	0	1	70/670
0/1	1	0	0	0	1	1	0	71/671
0/1	1	0	0	0	1	1	1	72/672
0/1	1	0	0	1	0	0	0	73/673
0/1	1	0	0	1	0	0	1	74/674
0/1	1	0	0	1	0	1	0	75/675
0/1	1	0	0	1	0	1	1	76/676
0/1	1	0	0	1	1	0	0	77/677
0/1	1	0	0	1	1	0	1	78/678
0/1	1	0	0	1	1	1	0	79/679
0/1	1	0	0	1	1	1	1	80/680
0/1	1	0	1	0	0	0	0	81/681

0/1	0	0	1	1	1	1	1	**32/632**
0/1	0	1	0	0	0	0	0	**33/633**
0/1	0	1	0	0	0	0	1	**34/634**
0/1	0	1	0	0	0	1	0	**35/635**
0/1	0	1	0	0	0	1	1	**36/636**
0/1	0	1	0	0	1	0	0	**37/637**
0/1	0	1	0	0	1	0	1	**38/638**
0/1	0	1	0	0	1	1	0	**39/639**
0/1	0	1	0	0	1	1	1	**40/640**
0/1	0	1	0	1	0	0	0	**41/641**
0/1	0	1	0	1	0	0	1	**42/642**
0/1	0	1	0	1	0	1	0	**43/643**
0/1	0	1	0	1	0	1	1	**44/644**
0/1	0	1	0	1	1	0	0	**45/645**
0/1	0	1	0	1	1	0	1	**46/646**
0/1	0	1	0	1	1	1	0	**47/647**
0/1	0	1	0	1	1	1	1	**48/648**
0/1	0	1	1	0	0	0	0	**49/649**
0/1	0	1	1	0	0	0	1	**50/650**

0/1	1	0	1	0	0	0	1	**82/682**
0/1	1	0	1	0	0	1	0	**83/683**
0/1	1	0	1	0	0	1	1	**84/684**
0/1	1	0	1	0	1	0	0	**85/685**
0/1	1	0	1	0	1	0	1	**86/686**
0/1	1	0	1	0	1	1	0	**87/687**
0/1	1	0	1	0	1	1	1	**88/688**
0/1	1	0	1	1	0	0	0	**89/689**
0/1	1	0	1	1	0	0	1	**90/690**
0/1	1	0	1	1	0	1	0	**91/691**
0/1	1	0	1	1	0	1	1	**92/692**
0/1	1	0	1	1	1	0	0	**93/693**
0/1	1	0	1	1	1	0	1	**94/694**
0/1	1	0	1	1	1	1	0	**95/695**
0/1	1	0	1	1	1	1	1	**96/696**
0/1	1	1	0	0	0	0	0	**97/697**
0/1	1	1	0	0	0	0	1	**98/698**
0/1	1	1	0	0	0	1	0	**99/699**

• Operating modes

Device's operating mode and parameters are set by changing the Operating Mode DIP Switch 4 pins positions.

Set switches **#1 through #8** to indicated positions, where:

- OFF = switch down
- ON = switch up

☝ NOTE ☝

Before changing between Normal/Test (switch 7) or ELS/ELS SELECT (switch 8) mode of operation all lockers must be unlocked via external or internal emergency open pushbutton 1.

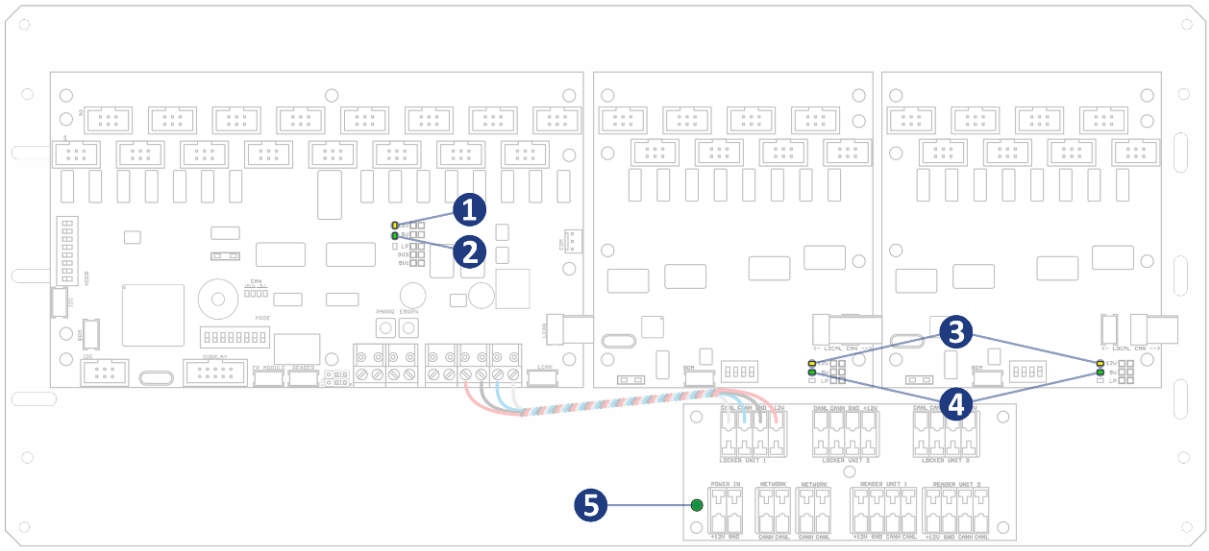
switch positions	parameter	setting
1	**Operating mode**	**OFF:** Normal operating mode **ON:** **Setup mode of operation**
2	**Keypad type**	**OFF:** 4 key keypad (Display RFID) **ON:** 12 key keypad (Display Combo & Display Keypad)
3	**Fingerprint module**	**OFF:** Fingerprint module in NOT connected **ON:** Fingerprint module is connected
4	**Reader**	**OFF:** RFID media reader is not present in the Display (Display Keypad) **ON:** RFID media reader is present in the Display (Display Combo & Display RFID)
5	-	Not used; Must be set to OFF.
6	**Special Keys**	**OFF:**RFID media is accepted as user key (Display Combo & Display RFID) **ON:** Only special keys are accepted (Display Combo & Display RFID)
7	**TEST mode**	**OFF:** Normal operating mode **ON:** Test mode of operation
8	**System**	**OFF:** ELS **ON:** ELS SELECT

• Power - on

After the device is powered on, its network address (number from 1 to 99 or from 600 to 699) is shown on Display for a few seconds. This feature is intended for maintenance personnel.
NOTE: If payment is turned ON, current Saldo is displayed after the network address.

• Signalization

• Power-on

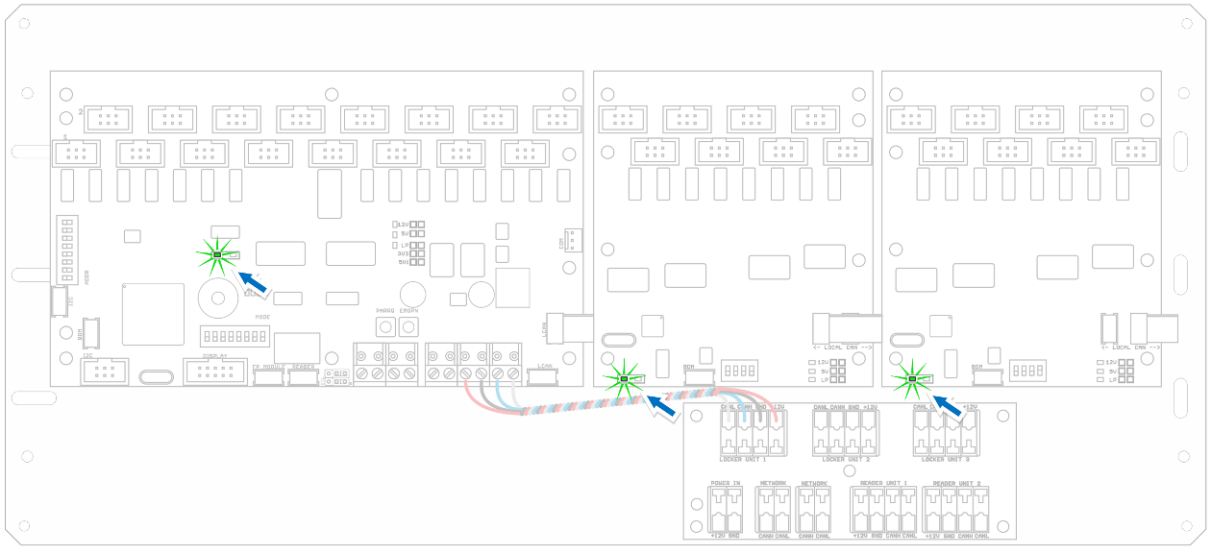


When power is applied the following LEDs are on:

- Yellow LED on Locker Controller 1 (12VDC present)
- Green LED on Locker Controller 2 (5VDC regulated on board active)
- Yellow LED on Extension Module(s) 3 (12VDC present)
- Green LED on Extension Module(s) 4 (5VDC present)
- Green LED on distribution board 5 (12VDC present)

• Operation

Each Locker Controller and Locker Extension Module has a blinking green LED operating indicator. All these signals are under software control indicating that the device is running.



• Network Communication

Network communication (Metra NET) is signalled on the Locker Controller by four LEDs:

- Left Green LED is on when the Locker Controller is receiving data packets from Extension Module(s).
- Left Red LED is on when the Locker Controller is transmitting data packets to Extension Module(s).
- Right Green LED is on when the Locker Controller is receiving data packets from Metra NET Network.

- Right Red LED is on when the Locker Controller is transmitting data packets to Metra NET Network.

• Actions and operating parameters

☝ NOTE ☝
Some operating parameters are system dependant and may not be available in your system.

For detailed actions and parameters descriptions see paragraph *"Setting Operational parameters – by Display's keypad"*.

action / parameter		System	default value	short description / values
dEFP	Default parameters	ELS ELS SELECT	-	Resets all parameters to factory default values.
nLOC	Number of Lockers	ELS ELS SELECT	32	Number of connected lockers. Can be set to 1, 2, 3,...32.
SLOC	Starting locker number	ELS ELS SELECT	1	Number of first connected locker. Can be set to 1, 2, 3,...7999.
CodE	Master Code*	ELS ELS SELECT	-	Has 5 sub-parameters: up to 5 master codes can be stored in.
SCod	Setting Code*	ELS ELS SELECT	-	Has 5 sub-parameters: up to 5 setup codes can be stored in.
Add	Add Master Key*	ELS ELS SELECT	-	Up to 5 Master Cards can be stored in.
ErAS	Erase all special keys and PIN codes*	ELS ELS SELECT	-	Erases all Master/Setup Codes and Master keys.
Aud	Audio Signal	ELS ELS SELECT	On	Can be activated (On) or silent (OFF).
En-A	Multiple locking	ELS	OFF	Can be enabled (On) or disabled (OFF).
GrUP	PIN code for multiple locking	ELS	8000	Visible only if multiple locking is enabled (On). Can be set to: 8000 to 9999.
EOPn	Emergency opening	ELS ELS SELECT	OFF	Can be enabled (On) or disabled (OFF).
AOPn	Auto opening	ELS	OFF	Can be set to: OFF (0), 1, 2, 3,...9999.
USr	User Waiting time	ELS ELS SELECT	5	Can be set to 1, 2, 3,...8 seconds.
USI	User Waiting time increment	ELS	2	Can be set to 1, 2, 3 or 4 seconds.
PinL	Minimal PIN Length	ELS ELS SELECT	1	Can be set to 1, 2, 3, 4 or 5.
PinC	Pin/Code Request display	ELS ELS SELECT	Pin	Can be set to "Pin" or "COdE".
LEu	Locker level	ELS	OFF	Can be set to OFF, 1, 2, 3 or 4.
LAC	Locker active time	ELS SELECT	30	Can be set to 30, 31, 32,...240 seconds
dISP	Occupied Locker signalisation	ELS	OFF	Can be enabled (On) or disabled (OFF).

LIS	White List	ELS	OFF	Can be enabled (On) or disabled (OFF).
PAY	Payment	ELS ELS SELECT	OFF	Can be set to OFF, On, Sign or bLOC.
P Co	Coin Value**	ELS ELS SELECT	1.00	Can be set to 0.10, 0.20, 0.25, 0.50, 1.00, 2.00 or 5.00.
P dU	Tenancy Duration**	ELS ELS SELECT	8 h	Can be set to OFF, 0 h, 1 h, 2 h,...24 h.
P LI	Payment Limit**	ELS ELS SELECT	1	Visible only if Tenancy duration is not set to "OFF" or "0". Can be set to 1, 2, 3,...31.
P dS	Currency**	ELS ELS SELECT	Euro	Can be set to "Euro", "Coin", "GbP", "PAY", "USd" or "CHF".
L dU	Locking duration***	ELS	8 h	Can be set to 1 h, 2 h, 3h,...24 h.
SALd	Display Saldo	ELS ELS SELECT	-	Displays sum of all inserted coins.
SALE	Erase Saldo	ELS ELS SELECT	-	Resets coin counter.

*Not avaliable if "Special Keys Mode" is set to "On-line" in Metra ELS/LCC software.
**Avaliable only if payment parameter is set to "On".
***Avaliable only if payment parameter is set to "Sign" or "bLOC".

• Setting Operational parameters – via Metra NET Network

- Metra Network Controller must be connected to Metra NET Network
- Metra server must be running and all hardware added in Metra ELS/ELS NET/LCC NET software.
- Each Locker Controller must have set its unique Metra NET Network address – ID.

OPTION 1 (downloading parameters to single divice at a time):

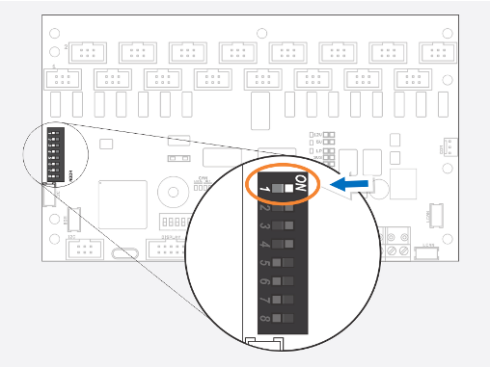
- By pressing the PARAMETERS REQUEST button on the Locker Controller you trigger the request for operating parameters.
- Operating parameters are downloaded to the Locker Controller.
- Check if correct operating parameters were downloaded. See chapter *"Functional Test"* for more details

OPTION 2 (downloading parameters to all devices at once):

- In Metra SW go to View\Download and click on the "Download All" button.
- Operating parameters are downloaded to all devices in the Metra NET Network.
- Check if correct operating parameters were downloaded. See chapter *"Functional Test"* for more details

• Setting Operational parameters – by Display's keypad

• Setup mode activation



STEP 1: With small flat headed screwdriver or similar tool set switch 1 located on the "Operating mode DIP switch" to ON (switch up). Device enters setup mode of operation. Use flat headed screwdriver or similar tool.

• Navigating thru menus with 4 key keypad

When you enter Setup mode, you can scroll down through menu by pressing on "down arrow" key and up by pressing the "up arrow" key. Use the "Enter" key to confirm selection and "Esc" key to cancel.

NOTE: To accelerate scrolling up/down thru the menus hold the "up/down arrow" key pressed.

Esc Key	**Up Key**	**Down Keys**	**Enter Key**
Cancel	For scrolling UP through the menus.	For scrolling DOWN through the menus.	Confirm selection

• Navigating thru menus with 12 key keypad

When you enter Setup mode, you can scroll down through menu by pressing on "8" or "0" key and up by pressing the "2" key. Use the ✓ key to confirm selection and ✗ key to cancel.

✗ Key	**UP Key**	**Down Keys**	**✓ Key**
Cancel	For scrolling UP through the menus.	For scrolling DOWN through the menus.	Confirm selection

- Initiating actions and setting operating parameters

ACTION	DEFAULT PARAMETERS	ELS ELS SELECT	

Action erases all current parameter values and sets them back to factory default.

4/12 key keypad: While sign "dEFP" is displayed press the "Enter"/✓ key. "ConF" is displayed and blinking. Press and hold the "Enter"/✓ key for a few seconds to confirm or press "Esc"/✗ key to cancel. When action is accepted, sign "YES" is displayed and all parameters are set back to default values. Device returns to parameter selecting mode.

☝ NOTE ☝
If the Fingerprint module is connected to the device, signs "ErAS", followed by "FP" are displayed before "YES".

PARAMETER	NUMBER OF LOCKERS	ELS ELS SELECT	

4 key keypad: While sign "nLOC" is displayed press the "Enter" key. Press the key for up or down on the Keypad to increase or decrease the number of connected lockers. Number can be set from 1 to 32. Confirm your selection with the "Enter" key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign "nLOC" is displayed press the ✓ key. With digit keys on the Keypad enter the number of connected lockers. Numbers from 1 to 32 are accepted. Confirm your selection with the ✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	STARTING LOCKER NUMBER	ELS ELS SELECT	

4 key keypad: While sign "SLOC" is displayed press the "Enter" key. Press the key for up or down on the Keypad to increase or decrease the number of the first connected locker. First locker number can be set from 1 to 8000-nLOC*. Confirm your selection with the "Enter" key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign "SLOC" is displayed press the ✓ key. With digit keys on the Keypad enter the number of the first connected locker. First locker number can be set from 1 to 8000-nLOC*. Confirm your selection with the ✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

***Example:** If nLOC=8, SLOC can be set from 1 to 7992.

PARAMETER	MASTER CODE	ELS ELS SELECT	

Not avaliable if “Special Keys Mode” is set to “On-line” in Metra ELS/LCC software.

4 key keypad: Not available.

12 key keypad: While sign “CodE” is displayed press the ✓ key. Sign “nbr” is displayed. Type in the number from 1 to 5 (Up to 5 different Master Codes can be stored). Master Code can be up to 16 digits long. Display shows digit position (01 to 16) and digit (0 to 9) separated by “-“.
The new Master Code must be typed in again to confirm it. Sign “ConF” is flashing on the display. Type in the new Master Code again and confirm it with the ✓ key. If new Master Code is confirmed correctly, sign “YES” is displayed otherwise sign “no” is displayed. Device returns to parameter selecting mode.

☝ NOTE ☝
If the Master Code under the number you entered already exists, after you press the ✓ key the Master Code is displayed digit by digit (Display shows digit position (01 to 16) and digit (0 to 9) separated by “-“). After the last digit of the code is displayed, sign “CodE” starts flashing. You can cancel the procedure with ✖ key or continue with entering new code by pressing on the key for first digit of the new Master Code.

PARAMETER	SETUP CODE	ELS ELS SELECT	

Not avaliable if “Special Keys Mode” is set to “On-line” in Metra ELS/LCC software.

4 key keypad: Not available.

12 key keypad: While sign “SCod” is displayed press the ✓ key. Sign “nbr” is displayed. Type in the number from 1 to 5 (Up to 5 different Setup Codes can be stored). Setup Code can be up to 16 digits long. Display shows digit position (01 to 16) and digit (0 to 9) separated by “-“.
The new Setup Code must be typed in again to confirm it. Sign “ConF” is flashing on the display. Type in the new Setup Code again and confirm it with the ✓ key. If new Setup Code is confirmed correctly, sign “YES” is displayed otherwise sign “no” is displayed. Device returns to parameter selecting mode.

☝ NOTE ☝
If the Setup Code under the number you entered already exists, after you press the ✓ key the Setup Code is displayed digit by digit (Display shows digit position (01 to 16) and digit (0 to 9) separated by “-“). After the last digit of the code is displayed, sign “SCod” starts flashing. You can cancel the procedure with ✖ key or continue with entering new code by pressing on the key for first digit of the new Setup Code.

ACTION	MASTER KEY	ELS ELS SELECT	

Not avaliable if “Special Keys Mode” is set to “On-line” in Metra ELS/LCC software or you are using Display Keypad.

4/12 key keypad: While sign “Add” is displayed press the “Enter”/✓ key. Time countdown starts (vertical lines are displayed) and interrupted beep acoustic signal is activated. Present a RFID media that you want to use as a Master key. After the RFID media is recodnized and stored as a Master Key time countdown restarts.
Up to 5 Master keys can be stored in.

☝ NOTE ☝
If any RFID media is presented and time countdown ends, device returns to Setup menu.

ACTION	ERASE ALL SPECIAL KEYS AND PIN CODES	ELS ELS SELECT	

Not avaliable if “Special Keys Mode” is set to “On-line” in Metra ELS/LCC software.

This erases all Master/Setup codes and Master keys.

4/12 key keypad: While sign “ErAS” is displayed press the “Enter”/✓ key. “ConF” is displayed and blinking. Press and hold the “Enter”/✓ key for a few seconds to confirm or press “Esc”/✗ key to cancel. When action is accepted, sign “YES” is displayed and all Master/Setup codes and Master keys are erased. Device returns to parameter selecting mode.

PARAMETER	AUDIO SIGNAL	ELS ELS SELECT	

4/12 key keypad: While sign “Aud” is displayed press the “Enter”/✓ key. Press the key for up or down on the Keypad to activate (On) or to deactivate - silent (OFF) the audio signalling. Confirm your selection with the “Enter”/✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	MULTIPLE LOCKING	ELS	

If set to On, Multiple locking with PIN Code is enabled.

4 key keypad: Not available.

12 key keypad: While sign “En-A” is displayed press the ✓ key. Press the key for up or down on the Keypad to enable (On) or to disable (OFF) multiple locking. Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	PIN CODE FOR MULTIPLE LOCKING	ELS	

PIN Code that activates multiple locking with PIN Code.

4 key keypad: Not available.

12 key keypad: While sign "GrUP" is displayed press the ✓ key. Type-in the 4 digit number from 8000 to 9999. This will be the new group PIN code for this device. Confirm your selection with the ✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	EMERGENCY OPENING	ELS ELS SELECT	

Remote emergency opening can be activated by pressing a button connected to the Network Controller (or by a Timetable). Each Metra Locker Controller can be set to enable or disable this feature.

4/12 key keypad: While sign "EOPn" is displayed press the "Enter"/✓ key. Press the key for up or down on the Keypad to enable (On) or to disable (OFF) emergency opening. Confirm your selection with the "Enter"/✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	AUTO OPENING	ELS	

Automatic opening can be set to open all lockers connected to the device after desired time. Time can be set in minutes from 1 to 9999 minutes. If 0 is selected then automatic opening is turned OFF.

4 key keypad: While sign "AOPn" is displayed press the "Enter" key. Press the key for up or down on the Keypad to increase or decrease automatic opening time. Time can be set to: OFF, 1, 2, 3,...9999 in 1 second steps. Confirm your selection with the "Enter" key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign "AOPn" is displayed press the ✓ key. With digit keys on the Keypad enter desired time in minutes. If you want to disable (OFF) automatic opening, enter 0. Confirm your selection with the ✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	USER WAITING TIME	ELS ELS SELECT	

After the Locker door is closed, system waits for RFID media / finger to be presented or PIN code entered, for chosen number of seconds.

4 key keypad: While sign “USr” is displayed press the “Enter” key. Press the key for up or down on the Keypad to increase or decrease user waiting time. Time can be set from 2 to 8 seconds in 1 second steps. Confirm your selection with the “Enter” key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign “USr” is displayed press the ✓ key. With digit keys on the Keypad enter desired time in seconds. Time can be set from 2 to 8 seconds in 1 second steps. Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	USER WAITING TIME INCREMENT	ELS	

User waiting time increments (slower countdown) after the countdown ended without presenting the ticket to lock the locker. This gives user more time to present the RFID media / finger or enter PIN code in second attempt.

4 key keypad: While sign “USI” is displayed press the “Enter” key. Press the key for up or down on the Keypad to increase or decrease user waiting time increment. Time can be set from 1 to 4 seconds in 1 second steps. Confirm your selection with the “Enter” key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign “USI” is displayed press the ✓ key. With digit keys on the Keypad enter desired time in seconds. Time can be set from 1 to 4 seconds in 1 second steps. Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	MINIMAL PIN LENGTH	ELS ELS SELECT	

Minimal PIN code length is set to 1 by default. This means that someone can close the locker with minimal 1 digit or maximal 4 digits PIN code. This parameter can be also set up to 2, 3, 4 or 5. If set to 4, only 4 digit PIN codes are accepted. If set to 5, only 4 digit PIN codes are accepted and last (fourth) digit entered automatically confirms the entered PIN code and there is no need to press the ✓ key to confirm.

4 key keypad: Not available.

12 key keypad: While sign “PinL” is displayed press the ✓ key. With digit keys on the Keypad enter desired minimal PIN Code length (from 1 to 4) for this Device. Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	PIN REQUEST DISPLAY	ELS ELS SELECT	

After the Locker is closed and Pin code requested, sign “Pin” or sign “COdE” can be displayed.

4 key keypad: Not available.

12 key keypad: While sign “PinC” is displayed press the ✓ key. Press the key for up or down on the Keypad to select “Pin” or “COdE”. Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	LOCKER LEVEL	ELS	

Exactly one locker can be locked with one RFID media on each level (group). Locker lever can be set to 4 different levels or as standalone. Standalone (OFF) means, that each Locker Controller is in its own group.

4 key keypad: While sign “LEu” is displayed press the ”Enter” key. Press the key for up or down on the Keypad to select desired locker level. Locker level can be set to OFF, 1, 2, 3 and 4. If OFF is selected locker level function is disabled (OFF). Confirm your selection with the “Enter” key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign “LEu” is displayed press the ✓ key. With digit keys on the Keypad enter desired locker level. Values from 0, 1, 2, 3 and 4 are accepted. If 0 is entered, locker level function is disabled (OFF). Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	LOCKER ACTIVE TIME	ELS SELECT	

Locker controller waits for Locker door to be closed for X seconds after successful Locker hire procedure. X can be set from 30 to 240 seconds.

4 key keypad: While sign “LAC” is displayed press the “Enter” key. Press the key for up or down on the Keypad to increase or decrease desired locker active time in seconds. Time can be set from 30 to 240 seconds in 1 second steps. Confirm your selection with the “Enter” key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

12 key keypad: While sign “LAC” is displayed press the ✓ key. With digit keys on the Keypad enter desired locker active time in seconds. Values from 30 to 240 are accepted. Confirm your selection with the ✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	OCCUPEID LOCKER SIGNALIZATION	ELS	

This feature can be viewed as information for user which locker was locked by her/his RFID media and where to go to open it. If the RFID media is presented and recognized as a locker key on different device the locker number is flashing on the display and interrupted acoustic signal is activated. Locker remains closed.

4/12 key keypad: While sign "dISP" is displayed press the "Enter"/✓ key. Press the key for up or down on the Keypad to activate (On) or to deactivate (OFF) the occupied locker signalization. Confirm your selection with the "Enter"/✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	WHITE LIST	ELS	

4/12 key keypad: While sign "LIS" is displayed press the "Enter"/✓ key. Press the key for up or down on the Keypad to activate (On) or to deactivate (OFF) the white list checking. Confirm your selection with the "Enter"/✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	PAYMENT	ELS ELS SELECT	

4/12 key keypad: While sign "PAY" is displayed press the "Enter"/✓ key. Press the key for up or down on the Keypad to select one of the following options:

OFF: Payment device is disabled. No tenancy limitations once the Locker is locked.

On: Payment device is enabled. Four additional sub-parameters are accessible in parameter selecting mode. Set them regarding your Coin Acceptor (currency and value of used coins), number of additional payment(s), and required tenancy time.

SIGn: (ELS only) Payment device is disabled. After the Locker is locked and tenancy expired, Locker expired signalization is turned on (two middle dots on the Display start flashing alternately). When all the Lockers with expired tenancy are unlocked, expired signalization is turned off. Also an additional tenancy time sub-parameter is accessible in parameter selecting mode and must be set.

bLOC: (ELS only) Payment device is disabled. After the Locker is locked and tenancy expired, Locker becomes blocked and expired signalization is turned on (two middle dots on the Display start flashing alternately). Blocked Locker can be unlocked only in Master mode or with Emergency Open and cannot be unlocked by user with corresponding PIN code, RFID media or fingerprint. When all the blocked Lockers are unlocked, expired signalization is turned off. Also an additional tenancy time sub-parameter is accessible in parameter selecting mode and must be set.

Confirm your selection with the "Enter"/✓ key. When parameter setting is accepted, sign "YES" is displayed. Device returns to parameter selecting mode.

PARAMETER	COIN VALUE	ELS ELS SELECT	

Parameter is available if Payment parameter (PAY) is set to “On”.

4/12 key keypad: While sign “P Co” is displayed press the “Enter”/✓ key. Press the key for up or down on the Keypad to scroll through the menu and **select coin value according your coin acceptor**. Coin values that can be selected are: 0.10, 0.20, 0.25, 0.50, 1.00, 2.00 and 5.00. Confirm your selection with the “Enter”/✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	TENANCY DURATION	ELS ELS SELECT	

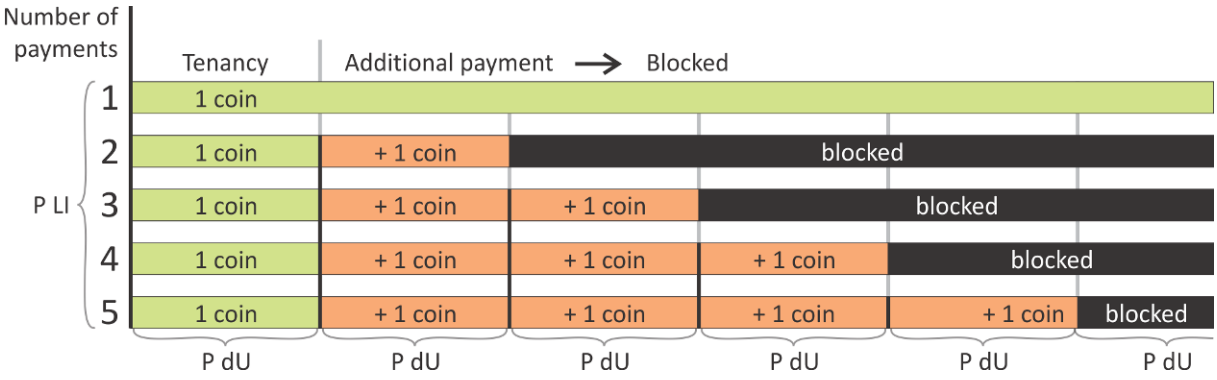
Parameter is available if Payment parameter (PAY) is set to “On”.

4/12 key keypad: While sign “P dU” is displayed press the “Enter”/✓ key. Press the key for up or down on the Keypad to scroll through the menu and select tenancy duration. Tenancy duration can be set to OFF, 0 h, 1 h, 2 h,...24 h in 1 hour steps. If “0 h” is selected there are no limits once locker is paid, same Locker can be locked and unlocked (with same Pin Code or RFID media) any time without payment (functionally does not apply if fingerprint is used). If OFF is selected payment is needed on every locking procedure. Confirm your selection with the “Enter”/✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	PAYMENT LIMIT	ELS ELS SELECT	

Parameter is available if Payment parameter (PAY) is set to “On” and parameter **“P dU” is not set to “OFF” or “0”**.

4/12 key keypad: While sign “P LI” is displayed press the “Enter”/✓ key. Press the key for up or down on the Keypad to scroll through the menu and payment limit. Number of payments can be set from 1 to 31. If 1 is selected, locker can always be unlocked without additional payment and locker never becomes blocked. Confirm your selection with the “Enter”/✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.



PARAMETER	CURRENCY	ELS ELS SELECT	

Parameter is available if Payment parameter (PAY) is set to “On”.

4/12 key keypad: While sign “P dS” is displayed press the “Enter”/✓ key. Press the key for up or down on the Keypad to scroll through the menu and select currency according your coin acceptor. Currency can be set to Euro, Coin, GbP, PAY, USd and CHF. Confirm your selection with the “Enter”/✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

PARAMETER	LOCKING DURATION	ELS	

Parameter is available if Payment parameter (PAY) is set to “bLOC” or “Sign”.

4/12 key keypad: While sign “L dU” is displayed press the “Enter”/✓ key. Press the key for up or down on the Keypad to scroll through the menu and select locking duration. Locking duration can be set to 1 h, 2 h,...24 h in 1 hour steps. If locking duration expires expired/blocked signalization is turned on. Confirm your selection with the “Enter”/✓ key. When parameter setting is accepted, sign “YES” is displayed. Device returns to parameter selecting mode.

ACTION	DISPLAY SALDO	ELS ELS SELECT	

Action is available only if Payment parameter (PAY) set to “PAY”.

4/12 key keypad: While sign “SALd” is displayed press the “Enter”/✓ key. Sum of all inserted coins is displayed and device returns to parameter selecting mode.

ACTION	ERASE SALDO	ELS ELS SELECT	

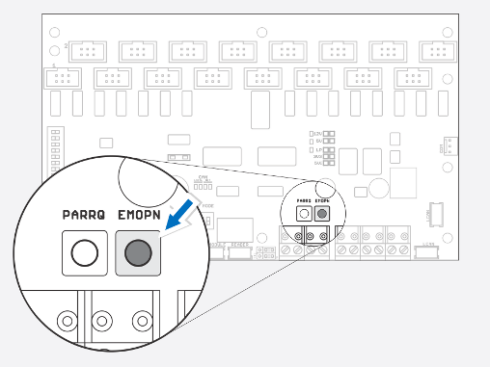
Action is available only if Payment parameter (PAY) set to “PAY”.

4/12 key keypad: While sign “SALE” is displayed press the “Enter”/✓ key. “ConF” is displayed and blinking. Press and hold the “Enter”/✓ key for a few seconds to confirm or press “Esc”/✗ key to cancel. When action is accepted, sign “YES” is displayed and saldo is erased. Device returns to parameter selecting mode.

• Emergency Open procedure

Locker Controller features an Emergency Open procedure, which unlocks all Electronic Locks connected to the Locker Controller and to all of the attached Locker Extension Modules. Locks are unlocked one by one, starting at the lock connected to the leftmost connector (position #1).

• Internal Emergency open pushbutton



STEP 1: Press the Emergency open pushbutton.

"EOPn" is displayed and all lockers connected to the Locker Controller start to unlock and open one after another and corresponding locker numbers are displayed.

• External Emergency open pushbutton

STEP 1: Turn the key on emergency open pushbutton clockwise to initiate emergency opening of all Lockers.

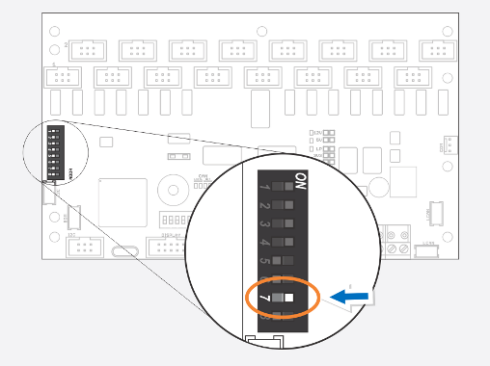
"EOPn" is displayed and all lockers connected to the Locker Controller start to unlock and open one after another and corresponding locker numbers are displayed.

• Test mode of operation

While still In Normal mode of operation all lockers should be opened by pressing the Emergency open pushbutton.

☝ NOTE ☝
Alarm will be initiated when Locker Controller is put back to Normal mode if locker is opened in Test mode.

• Test mode activation



STEP 1: With small flat headed screwdriver or similar tool set switch 7 located on the "Operating mode DIP switch" to ON (switch up).

STEP 2: Power-off and back on the Locker Controller to activate the Test mode.

STEP 3: Shortly after power on, numbers from "0.0.0.0." to "9.9.9.9." are displayed. This indicates that the Test mode of operation is activated.

NOTE: To return to Normal mode of operation set the switch 7 back to OFF (switch down) and power-off and back on the Locker Controller.

- Testing electronic locks installation

STEP 1: Close the locker door.

STEP 2: Locker index (1-32 as it is connected to the Locker Controller) is displayed.

STEP 3: Locking time in milliseconds is displayed shortly after locker index. Locking time should be between 150 and 300.

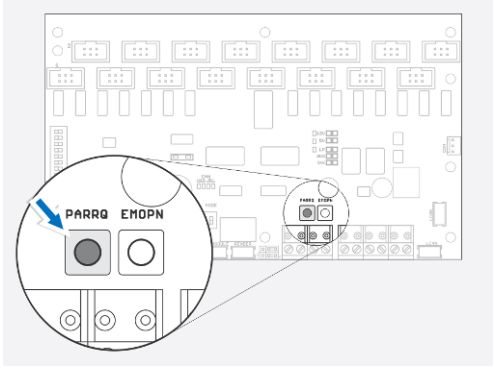
STEP 4: After 2 seconds the unlocking starts automatically. Locker index is displayed again.

STEP 5: Electronic Lock unlocks and the locker opens.

STEP 6: Unlocking time in milliseconds is displayed shortly after locker index. Unlocking time should be between 150 and 300.

☝ NOTE ☝
You can repeat this procedure on all lockers connected to Locker Controller board.

- Closing Lockers for transportation



By pressing the parameter request pushbutton you toggle between “close” (CLOS) and “close & open” (CLOP) mode of operation. After the pushbutton is pressed “CLOS” or “CLOP” is displayed, indicating the current mode of operation.

NOTE: When you start the TEST mode the device is in “close & open” mode of operation.

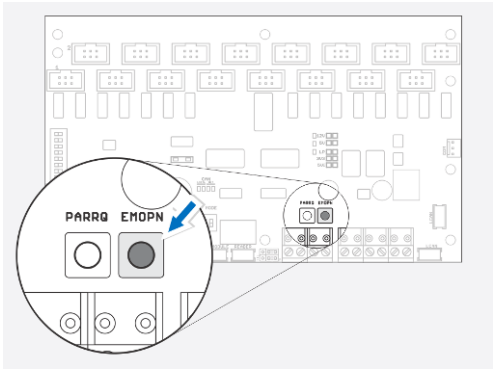
STEP 1: To close the lockers for transportation select “CLOS” by pressing the parameters request pushbutton.

STEP 2: Close the locker door.

STEP 3: Locker index (1-32 as it is connected to the Locker Controller) is displayed.

STEP 4: Locking time in milliseconds is displayed shortly after locker index. Locking time should be between 150 and 300.

- Testing Emergency open pushbutton



Internal: Press the Emergency open pushbutton.

External: Turn the key on emergency open pushbutton clockwise to initiate emergency opening of all Lockers.

Signalization: "EOPn" is displayed and all lockers connected to the Locker Controller start to unlock and open one after another and corresponding locker numbers are displayed.

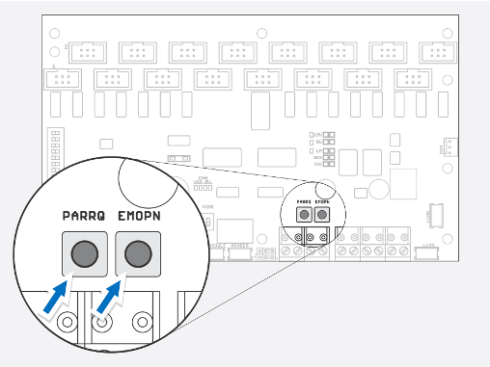
- Testing Coin acceptor

STEP 1: Insert coin in the coin acceptor.

STEP 2: When the coin is recodnized "inP" is displayed.

- Erasing operating parameters

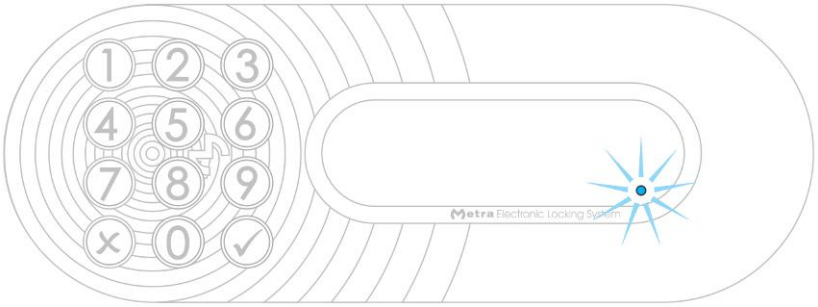
Operating parameters can be erased (initialized to default values) only in TEST mode of operation.



While powering-up the Locker Controller in TEST mode of operation, press and hold both buttons (Emergency open and Parameters request) for more than 3 seconds.

• Warning signalization

If locker was unlocked but not opened (door is jammed) blue dot lights up on the right side of the 4 digit LED display.



• Alarm signalization

If any of the lockers gets broken in, the alarm notice is displayed. The interrupted acoustic signal is turned on. Display alternately shows '-AL-' notice and the locker number for 20 seconds (or as set in Metra software).

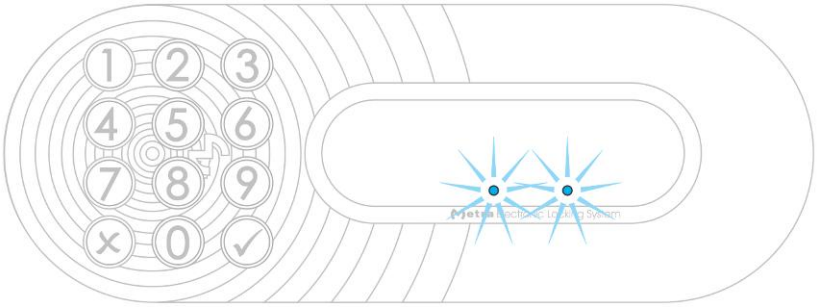
- Checking of locker Alarm functionality

The purpose of the test is to make sure that each Electric Lock functions properly. Locks can be tested only when they are unlocked (locker door opened).

Simulate locking procedure without closing the Locker door (press on the plunger). After the Lock is locked, wait for 20 seconds and release the plunger. ALARM must be activated.

• Expired/Blocked signalization

Available if Payment parameter is set to “Sign” or “bLOC”. After the Locker is locked and tenancy expired, Locker expired signalization is turned on: two middle dots start flashing alternately. When all the Lockers with expired tenancy are unlocked, expired signalization is turned off.



• Remote opening of single locker signalization

If remote opening of single Lockers is initiated over the network the system signals this by acoustic signal and displaying “EOPn” message followed by locker number.

• Functional Test

We assume that all lockers are assembled correctly as it is described in *“Electronic Lock - Installation Information”* and all cables correctly wired and connected to the Locker Controller.

1. Checking the lockers wiring order
2. Closing/hiring the lockers
3. Locking the lockers
4. Unlocking the lockers

This test is performed at the end of installation procedure. This test can also be done prior to installation on the field (technical failure can occur during the transport).

NOTE: Before you start the functional test, make shure that Locker Controller is powered on.

• Checking locker wiring order (ELS Systems only)

Slowly press and release the plunger of each Electric Lock several times.

After fourth press the Locker number is shown on the display.

NOTE: Check if displayed number corresponds to the Locker number fixed on the door!

• Locking / Unlocking of All Lockers

The purpose of the test is to make sure that each Electric Lock functions properly. Locks can be tested only when they are unlocked (locker door opened).

Locking procedure
See *"ELS - User Manual"* or *"ELS SELECT – User Manual"* paragraph *"Locking procedures"*.

Unlocking procedure
See *"ELS - User Manual"* or *"ELS SELECT – User Manual"* paragraph *"Unlocking procedures"*.

• Device replacement

This chapter describes Locker Controller replacement procedure. The problem should be identified before any repairing is tried.

STEP 1: Disconnect the power supply.

☝ NOTE ☝
Disconnect the adapter not the wires fixed on the Locker Controller board to avoid short circuit.

STEP 2: Open the Locker Controller Box/Locker (see Locker manufacturer's documentation).

STEP 3: Disconnect all cables and **mark their exact position.**

STEP 4: On the new Locker Controller set the same network address and operating mode.

STEP 5: Replace the Locker Controller with a new one.

STEP 6: Reconnect all cables **exactly the same as they were connected previously**.

STEP 7: Connect the power supply.

STEP 8: Press the parameters request "PARRQ" button to download operating parameters as they were on the previous Locker Controller.

STEP 9: Close the Locker Controller Box/Locker (see Locker manufacturer's documentation).

• Maintenance

No special maintenance is needed.
The maintenance people should check the device operation at least once a year.

☝ NOTE ☝
Direct spraying or splashing water can cause damage to Locker Controller or Electric Locks!

• Troubleshooting Guide

trouble	explanation / solution
Locker door closed while locking and nothing happens.	Adjust the door strike. Check the Electric Lock. Replace the Electric Lock if necessary.
The Locker door not ejected when unlocked.	Adjust the door strike.
Right blue dot on a display is turned on.	Check the doors (if any jammed – unlocked lock & closed door at the same time). Check the download parameters, if all set locks (from 1-16 / 1-24 / 1-32) are also connected to the main electronics board and extension modules.

• Technical data

Operating voltage	12V DC regulated (11.5 – 15V DC tolerated)
Current consumption	PCB: 0.65 A peak, 0.45 A average PCB with two extension modules: 2 A peak, 1 A average
Operating temperature range	0 to +50 °C
Audio signal	integrated piezoelectric beeper

Buffer capacity	40 records
Electronic Lock Interface	Up to 16/24/32 El. Locks, 6 wire flat cable, max. length 20m
Dimensions in mm (w/h/l)	100/20/179 main electronics 100/20/89 extension board 171/5/380 mounting plate
Connections	Power, Metra NET Network, Display, Coin acceptor, external Emergency open push-button,

• Appendix

1 **Physical dimensions**
Locker Controller
Locker Controller Extension Module

2 **Physical dimensions**
Mounting rails

3 **Physical dimensions**
Mounting plate

4 **Physical dimensions**
Coin Acceptor mounting hole

5 **Physical dimensions**
Fingerprint module

6 **Network schematic**

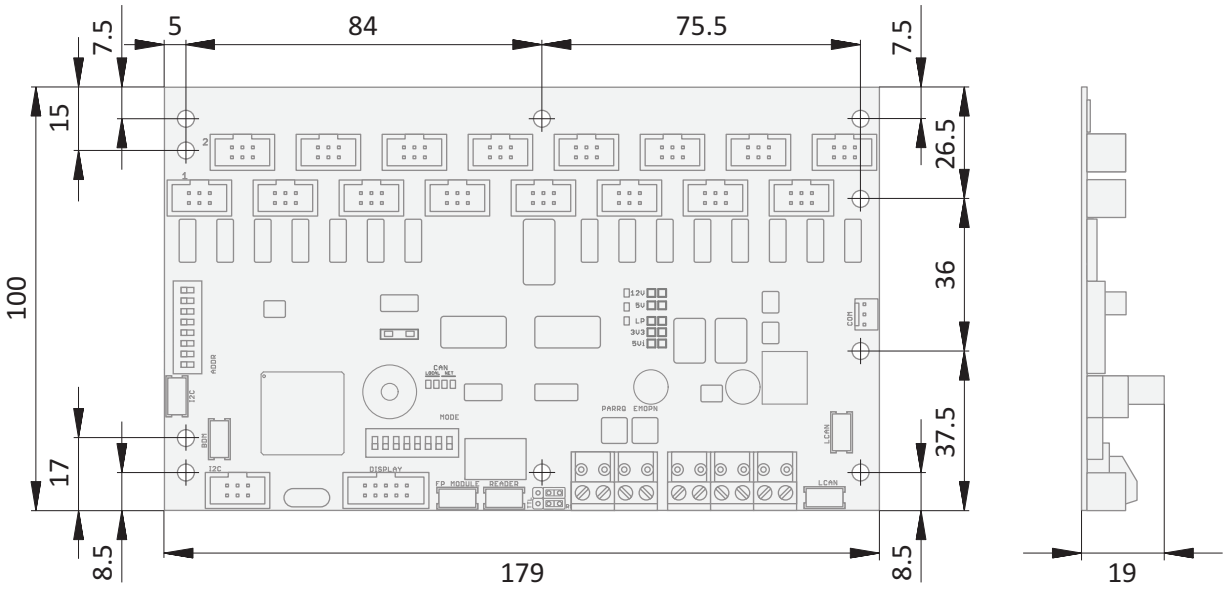
7 **Cable installation**

8 **Device configuration (example 1)**

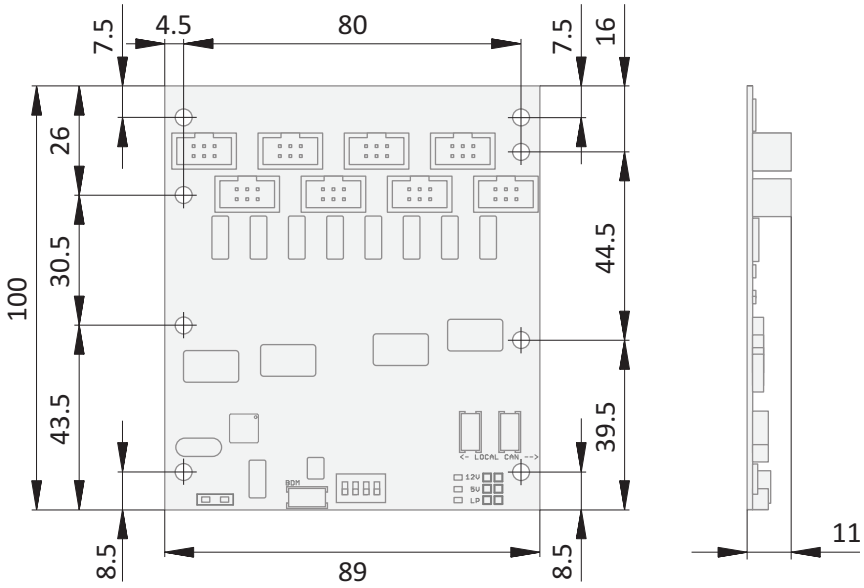
9 **Device configuration (example 2)**

Physical dimensions

Locker Controller

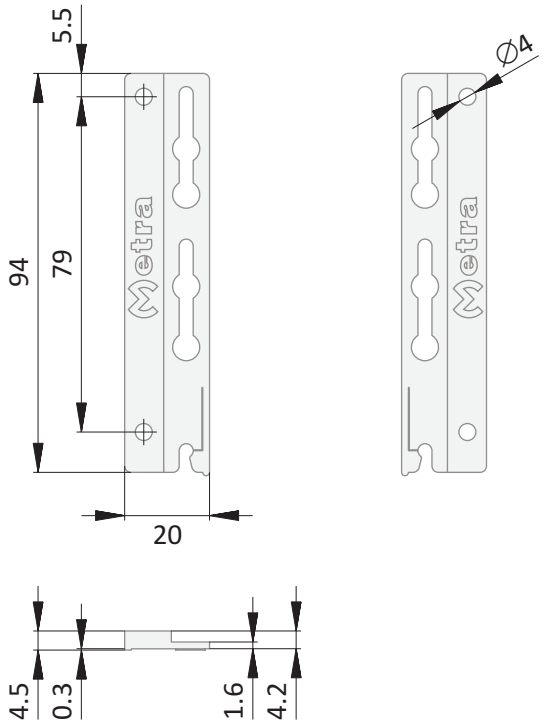


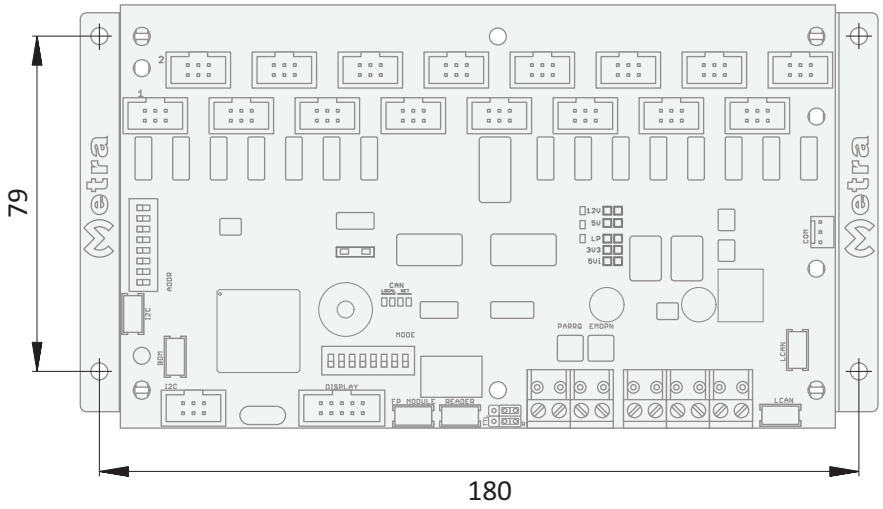
Locker Controller Extension Module



Physical dimensions

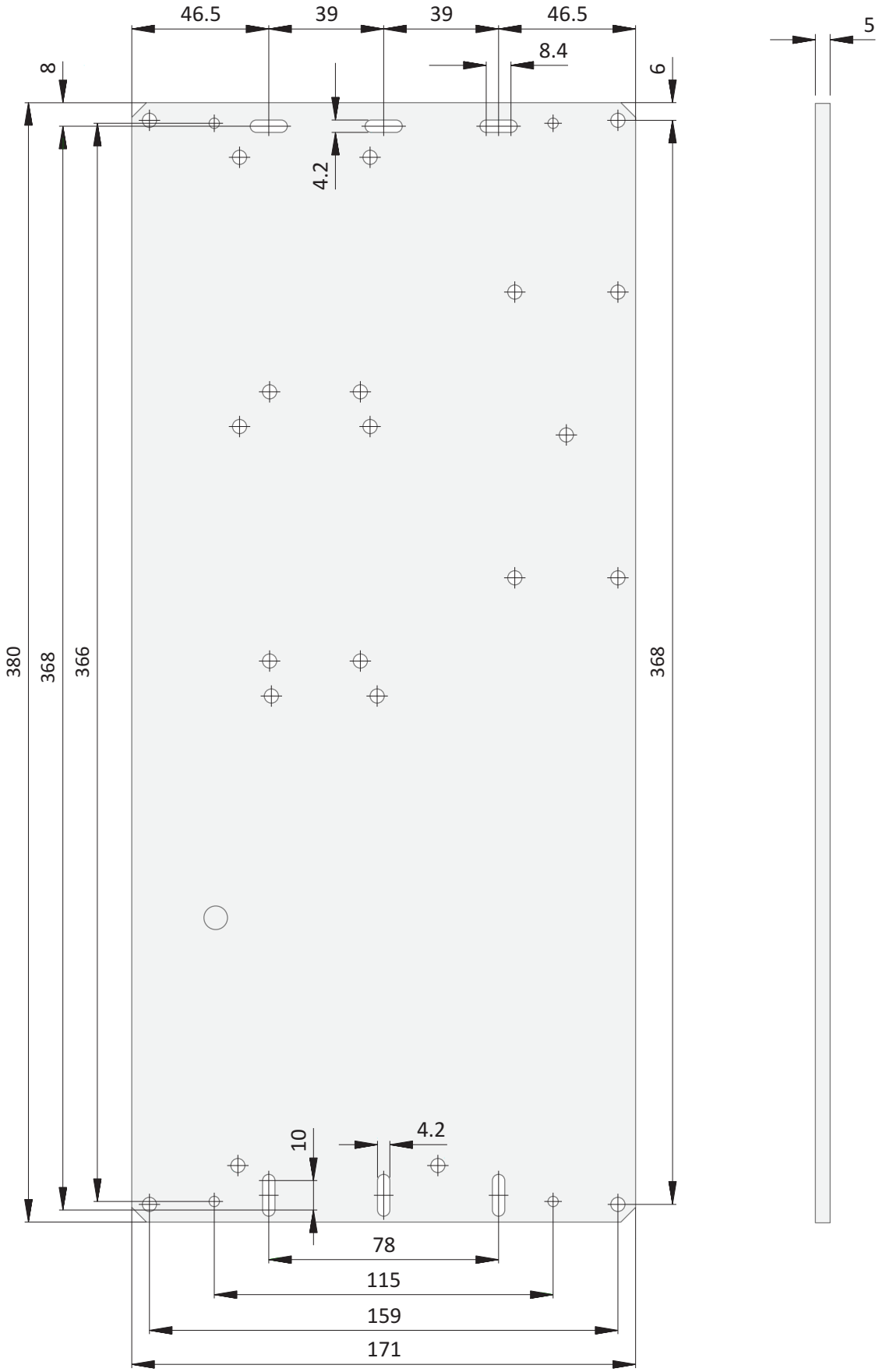
Mounting rails





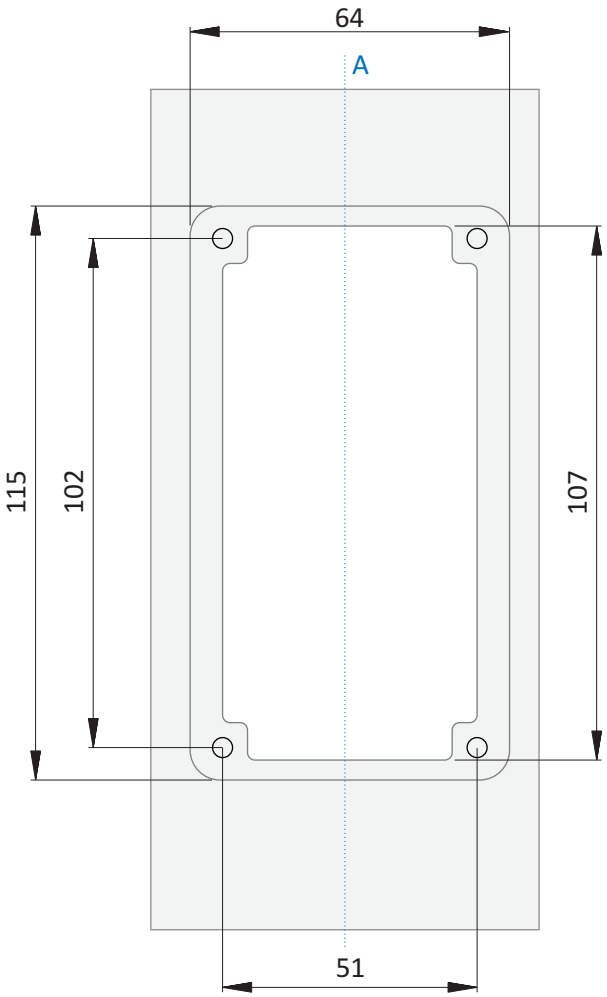
Physical dimensions

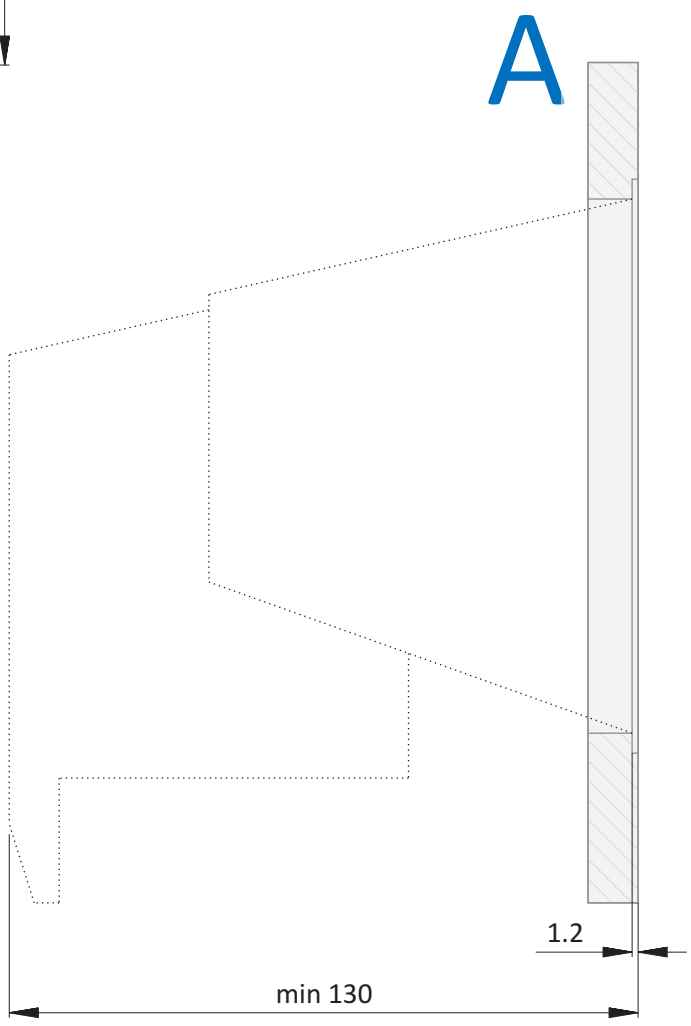
Mounting plate



Physical dimensions

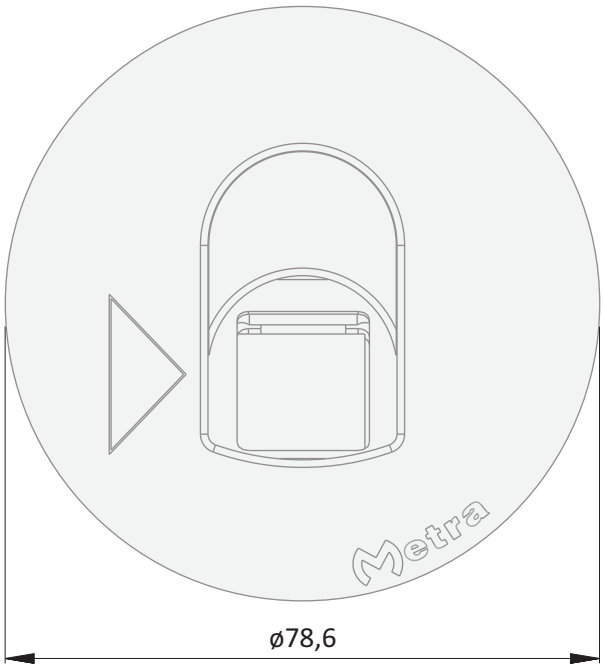
Coin Acceptor mounting hole

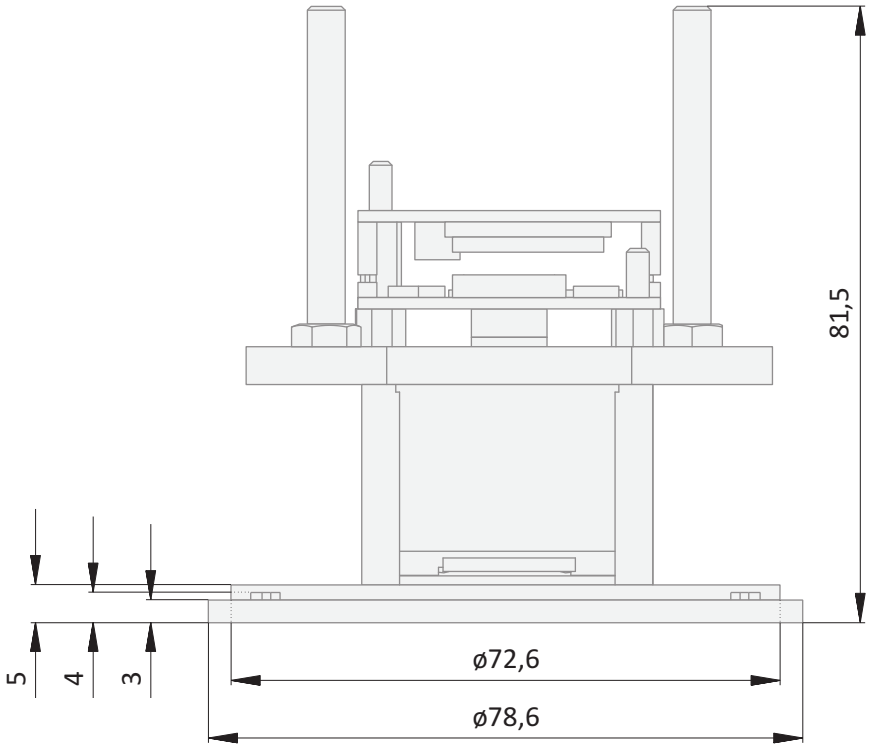




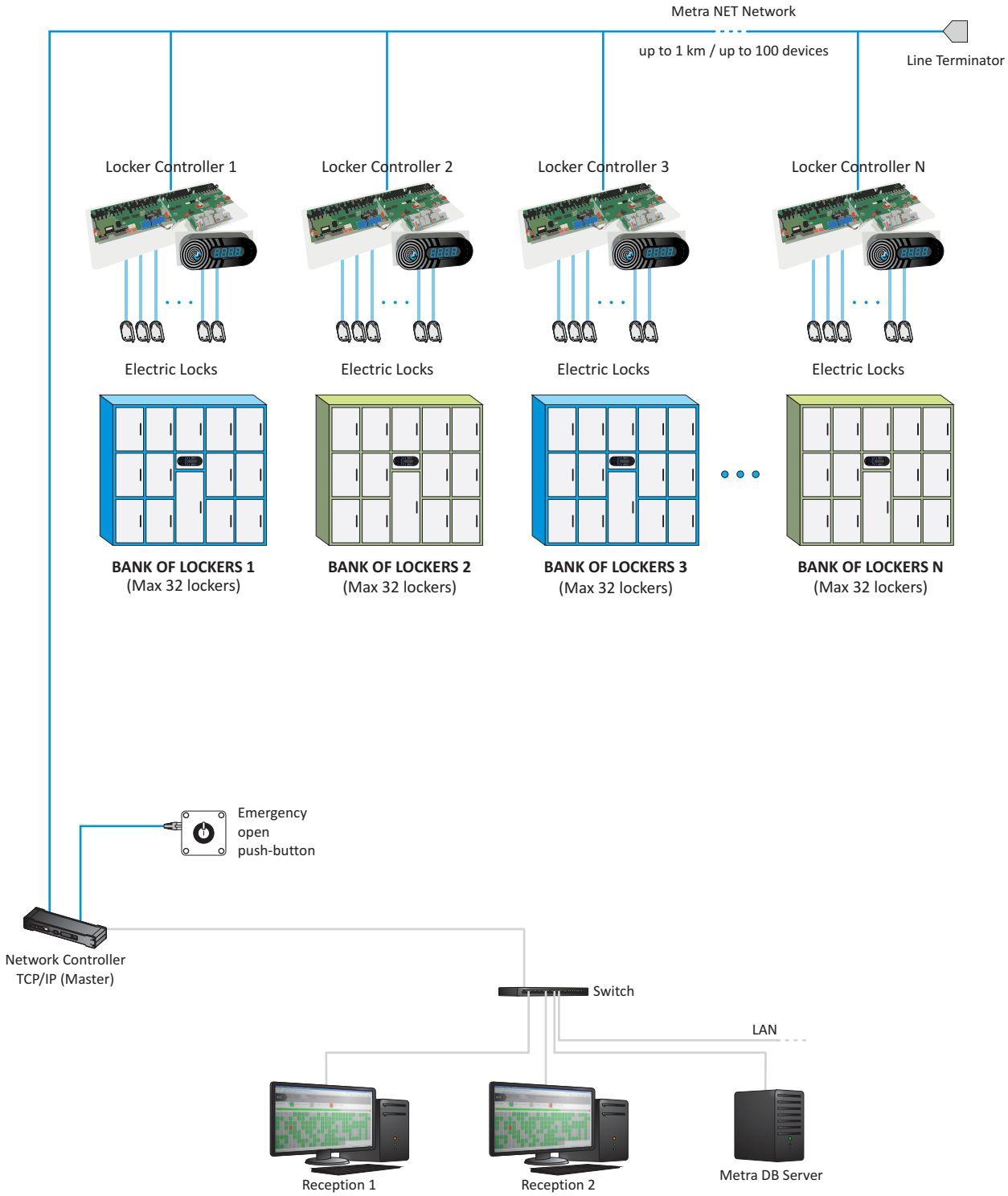
Physical dimensions

Fingerprint module

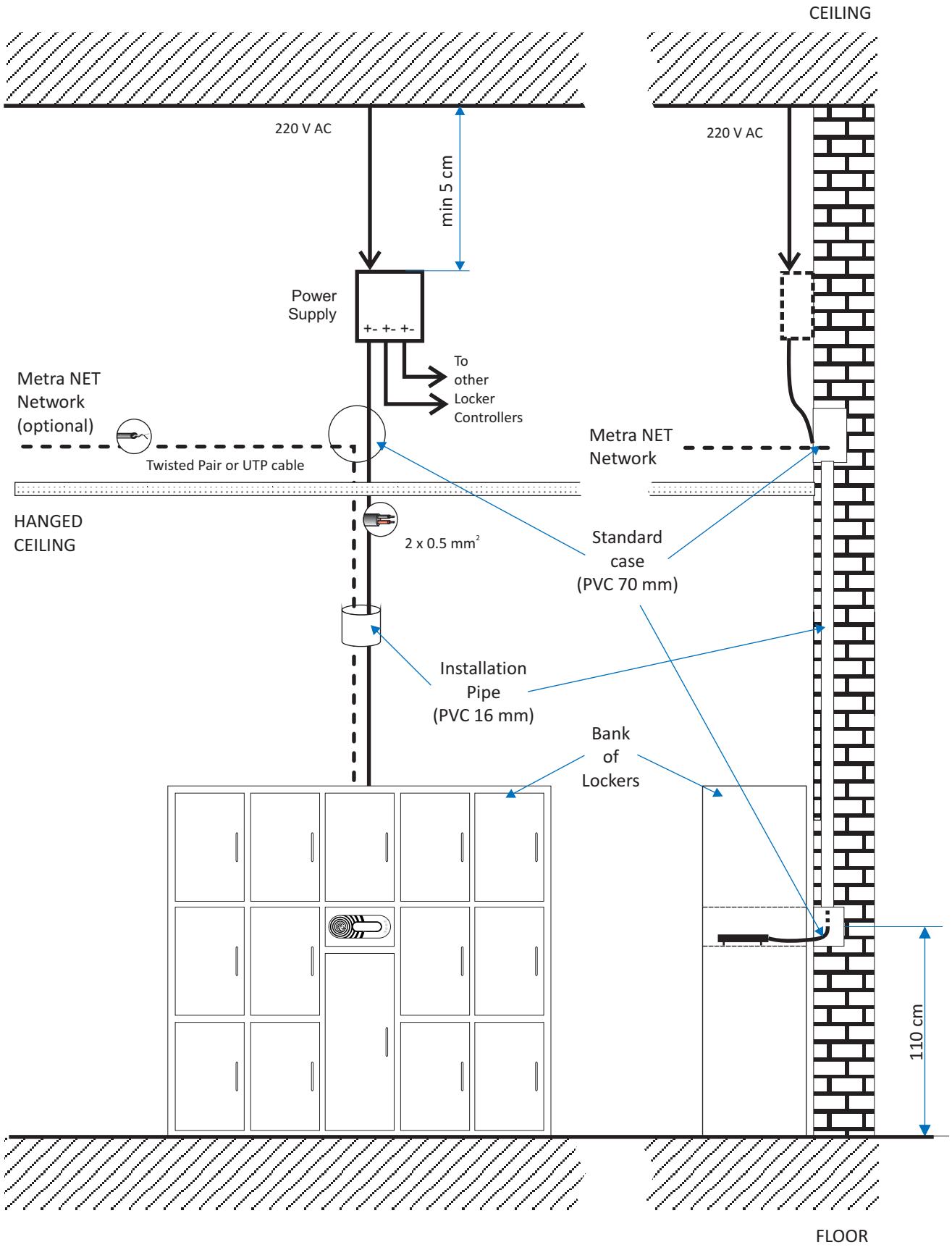




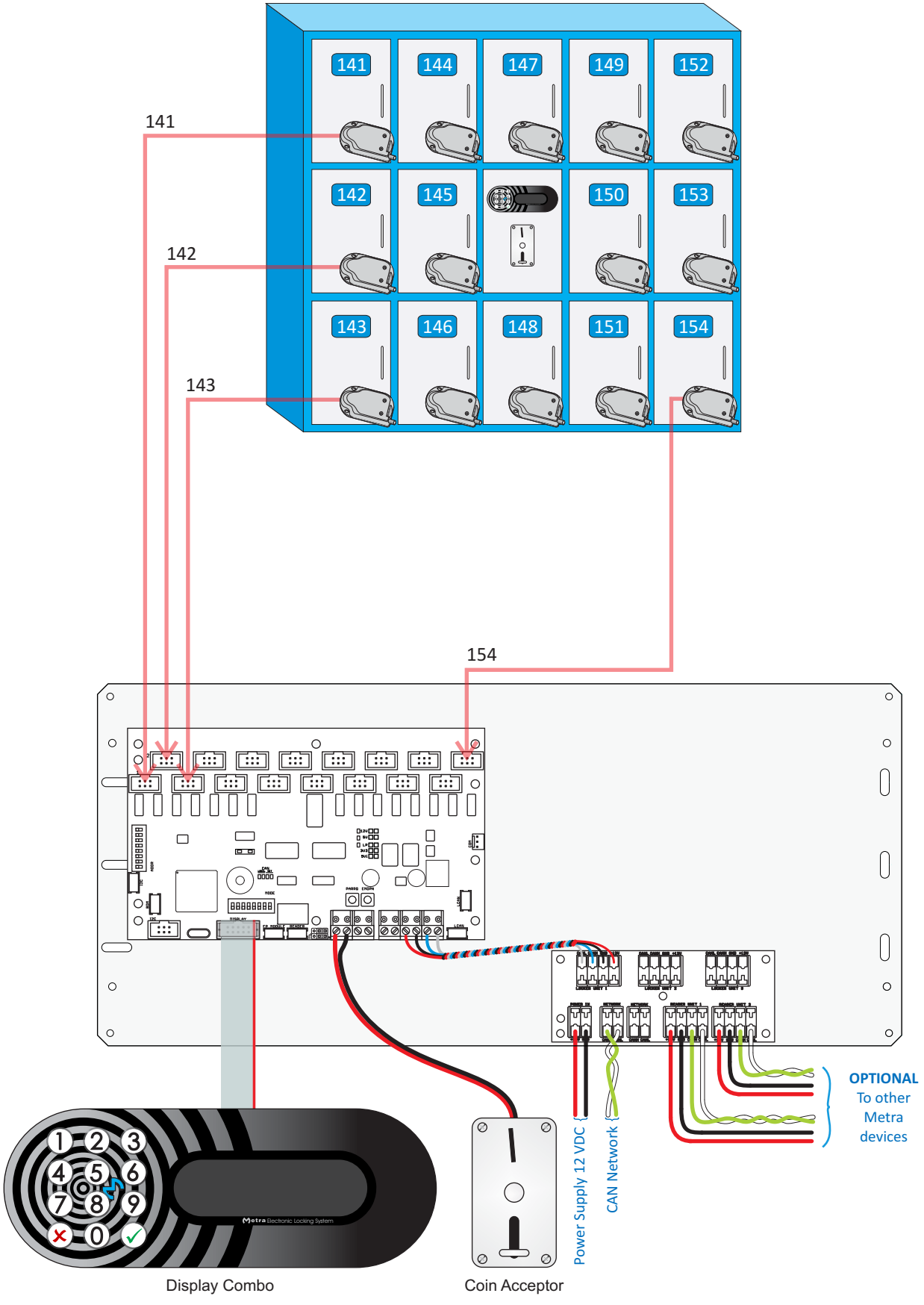
Network schematic



Cable installation



Device configuration (example 1)



Device configuration (example 2)